This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

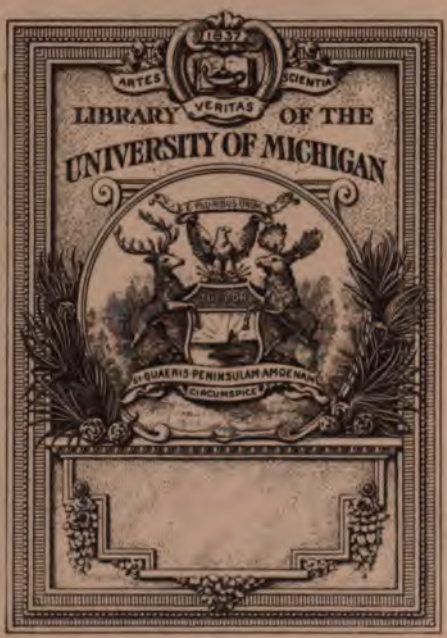
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

A 413548


ARTES
VERITAS
SCIENTIA
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
SI QUAERIS PENINSULAM AMOENAM
CIRCUMSPICE

JV14
N15
S7.

MEDICAL COMMUNICATIONS

OF THE

MASSACHUSETTS MEDICAL SOCIETY.

WITH AN APPENDIX,

CONTAINING THE PROCEEDINGS OF THE COUNCILLORS AND OF THE SOCIETY.

VOLUME X.

SECOND SERIES.—VOLUME VI.

IN SIX PARTS.

BOSTON:
PRINTED FOR THE SOCIETY.
MEDICAL AND SURGICAL JOURNAL OFFICE.
David Clapp & Son.
1866.

CONTENTS OF APPENDIX.

	PAGE.
Proceedings of the Councillors, 1860–61	1
Proceedings of the Society, Adjourned Meeting, Oct. 3, 1860	11
Proceedings of the Society, Adjourned Meeting, Nov. 7, 1860	12
Proceedings of the Society, Annual Meeting, May, 1861	14
Treasurer's Annual Report	18
Officers of the Society	19
Officers of the District Societies	24
Supplement to the Catalogue	27
Proceedings of the Councillors, 1861–62	33
Proceedings of the Society, Annual Meeting, May, 1862	40
Treasurer's Annual Report	43
Officers of the Society	45
Officers of the District Societies	50
Supplement to the Catalogue	53
Proceedings of the Councillors, 1862–63	61
Treasurer's Annual Report	69
Proceedings of the Society, Annual Meeting, June, 1863	73
Officers of the Society	79
Officers of the District Societies	84
Supplement to the Catalogue	87
Proceedings of the Councillors, 1863–64	95
Proceedings of the Society, Annual Meeting, May, 1864	106
Treasurer's Annual Report	109
Officers of the Society	113
Officers of the District Societies	118
Supplement to the Catalogue	121

Proceedings of the Councillors, 1864–65 129
Proceedings of the Society, Annual Meeting, May, 1865 . . . 137
Treasurer's Annual Report 141
Officers of the Society 145
Officers of the District Societies 150
Catalogue of the Fellows 153

Proceedings of the Councillors, 1865–66 173
Proceedings of the Society, Annual Meeting, May, 1866 180
Treasurer's Annual Report 185
Officers of the Society 189
Officers of the District Societies 194
Catalogue of the Fellows 197

CONTENTS.

PAGE.

Annual Discourse for 1861.—"The Physician and Surgeon in War."
By HENRY C. PERKINS, M.D., of Newburyport 9
List of Deceased Members 37
Obituary 37
Biographical Notice of Ephraim Stone 38
" " of William Parkhurst 38
" " of Woodbridge Strong 39
" " of Joseph James Lloyd Whittemore . . 39
" " of Horatio Adams 40
" " of Samuel Taylor 42
" " of Daniel Mowe 43
" " of Horatio Thomson 44
" " of William Williams 44
" " of Horace Walter Adams 45
Reminiscences of Fever. By HENRY C. PERKINS, M.D., of Newburyport 47

Annual Discourse for 1862.—"Topographical Distribution and Local Origin of Consumption in Massachusetts." By HENRY I. BOWDITCH, M.D. 59
List of Deceased Members 155
Obituary 156
Biographical Notice of John Burroughs Alley 156
" " of Benjamin Atkinson 157
" " of Luther V. Bell 157
" " of John Ball Brown 158
" " of Johnson Clark 159
" " of Amos Farnsworth 159
" " of John E. Hathaway 160
" " of Jacob Hayes 160
" " of William Hooker 160
" " of Hiram Hosmer 161
" " of E. K. Sanborn 162
" " of Jonas Henry Lane 163

Biographical Notice of John F. W. Lane 164
" " of William Nourse Lane 165
" " of Jesse Merrill 165
" " of Amos Parker 166
" " of Truman Rickard 166
" " of Isaac P. Smith 167
" " of James R. Wellman 167
" " of Simon Whitney 168
" " of Jonathan Wild 168

Hypodermic Injections in the Treatment of Neuralgia and other Diseases of the Nervous System. By A. Ruppaner, M.D., of Boston . 169

Annual Discourse for 1863.—"The Reality and Certainty of Medicine." By Morrill Wyman, M.D., of Cambridge 216

Obituary 263
Biographical Notice of Paul Spooner 263
" " of Samuel Foster Haven, Jr. 263
" " of Robert Ware 264

Annual Discourse for 1864.—"Recent Progress in Surgery." By J. Mason Warren, M.D. 267

List of Deceased Members 341

Obituary 342
Biographical Notice of George Hayward 342
" " of John Call Dalton 343
" " of Francis Boott 344
" " of John Ware 347

On the Use of Straw as a Substitute for Splints or the Fracture-Box, in the Treatment of Fractures of the Leg. By John Green, of Boston . 349

Annual Discourse for 1865.—"Disease;—a Part of the Plan of Creation." By Benjamin E. Cotting, M.D., of Roxbury 353

List of Deceased Fellows 390

Obituary 391
Biographical Notice of George Bartlett 391
" " of Joel Henry Brown 392
" " of S. Fayette Clapp 392
" " of Luther Metcalf Harris 393
" " of J. Lawrence Fox 394
" " of Lucius M. Sargent, Jr. 395
" " of William Johnson Walker 396

Annual Discourse for 1866.—"The Medical Profession and Society." By George C. Shattuck, M.D. 399

ARTICLE I.

THE PHYSICIAN AND SURGEON IN WAR.

BY HENRY C. PERKINS, M.D.,
OF NEWBURYPORT.

READ AT THE ANNUAL MEETING, MAY 29, 1861.

MR. PRESIDENT AND GENTLEMEN:

THE significant remark of Desgenettes to the French surgeon-in-chief, that it was the duty of the physician to save life, not to destroy, undoubtedly occurred to the mind of every gentleman whom I have the honor to address, as he saw the dark clouds of war gathering in the horizon, and the hosts mustering for a contest which is to decide forever the fate of that government and of those institutions under which he was born; and under the protection of whose beloved banner he has enjoyed that quiet rest so conducive to the cultivation of science, literature and art, and so congenial to his feelings as a friend of suffering humanity and as a Christian.

As the topic then suggested by the banners flaunting in the breeze, by the soul-stirring notes of the bugle and the distant report of the opening gun, no less than by that of the ordinary occasion which brings us from the bedside of the patient to this

friendly interview, I propose to address you upon — THE DUTIES OF THE PHYSICIAN AND SURGEON IN WAR AND IN THE DAY OF BATTLE; and if my remarks should appear trite, desultory, or devoid of interest, as they may — from the shortness of time allowed for preparation, and want of experience in such an emergency — I feel that I can confidently rely upon the subject I have selected, to atone for any imperfection or want of interest you may have in the speaker; and upon your knowledge, good sense, character, patriotism and devotion to professional duties, to fill in the sketch I shall attempt to draw.

I shall discuss my topic under the following heads:

I. The duty the physician and surgeon owes himself, which involves his duty to his patient.

II. The duty he owes his country, involving his accountability to the Great Ruler of the universe.

Educated, with few exceptions, as the present generation of physicians and surgeons have been, for the practice of their profession in civil rather than in military life, now that the hazards of war are upon us, it becomes the duty of each one to qualify himself for new scenes of action and new fields of service. It may be, that amid the din of battle and the clash of arms, the youngest and most inexperienced of our number will be first called upon to stay the ebbing tide of life, and, on the spur of the moment, to decide upon a mode of treatment which shall be for the weal or woe of his friend or brother. How indispensable, then, a

calm and collected state of mind and self-reliance, arising from an acquaintance, at least, with the principles of action in the case before him! And how can this be secured but by study and experience? It becomes imperative, then, upon every member of our profession, to acquaint himself at once with the best authors on military surgery within his reach. The works of Hunter, Hennen, Guthrie, Mann and Larrey, should be carefully studied, Guerin's Chirurgie Operatoire, Gibson or Erichsen carefully reviewed — at least, such parts of them as relate to wounds, incised, punctured, or contused, to gun-shot wounds, fractures and dislocations — and no opportunity to cut down, on the dead body, for the main arteries, or for the performance of such operations as circumstances may permit, should be allowed to pass unimproved. Most fortunately, by the kindness of friends in this city, many of us have enjoyed the pleasure and profit of listening to the instruction of the distinguished Professor of Surgery in the Medical School of Harvard University, and of witnessing his neat operations upon dead and living bodies. For such opportunities, we beg him and them to accept our most hearty thanks. To such as have not recently enjoyed these privileges, let me say, *drilling*, to the inexperienced surgeon on the eve of battle, is no less necessary than to the young recruit. The former, no less than the latter, should see to it that his arms are in order, and that he knows how to use them. The character of wounds should be as readily recognized by the surgeon, as the foe by the soldier; and the principles of their treatment should

be as familiar to the one as are military evolutions and tactics to the other. To these principles, as drawn from the best authors, we invite attention, with the double object in view, of refreshing our own memory and inducing others to do the same, and to supply any deficiency and correct any error that may be discovered in the speaker. To those who listened to Dr. Bigelow's lectures, a portion of my address may serve as an imperfect review or résumé, for which I crave their indulgence; while to those who were not thus favored, I trust my remarks may serve as a substitute, so far as principles are concerned, and as incentives to study and to action.

Before entering upon the treatment of wounds, it may be well to make a few general observations upon the nature of gun-shot wounds, and their effects upon the constitutional powers. The only wounds which the surgeon in civil practice sees, that in any way resemble those witnessed by the military surgeon, are the wounds presented by the accidents upon our railroads. The action of a cannon ball, on coming in contact with our limbs, deadens not only the parts impinged upon, but diminishes, if it does not actually destroy, the vitality or normal condition of adjacent parts; so that, in the performance of amputations, care should be taken to operate in such a manner as to preclude the necessity of any secondary operation. Our incisions, if possible, should be made above any part in danger of sloughing; and for the same reason, the artery should be secured as high as possible, and the bones sawed

off above all local injury. The bullet deadens the part in the neighborhood of the wound, but it is by no means true that its entire track must slough. The Minié ball appears to be peculiarly destructive to the bony parts, fracturing and comminuting them to an extent, and in a manner, truly surprising.

Before proceeding to any operation involving the removal of a member, a thorough knowledge of all the wounds which the patient may have sustained, demands the most careful attention; for it has so happened in military surgery, as appears from Hennen, that a limb has been removed and dressed before it was discovered that the patient had, beside, a wound through the body, which must of necessity prove fatal.

The state of collapse consequent upon a trifling, no less than a severe wound, should receive attention. Hence Hennen recommends that the surgeon should always have about his person a canteen of wine, to revive the fainting spirit of his patient. "This tremor," he says, "which has been so much talked of, and which to an inexperienced eye is really terrifying, is soon relieved by a mouthful of wine or spirits, or by an opiate, but above all by the tenderness and sympathizing manner of the surgeon, and his assurance of the patient's safety."

The *continuance* of this alarm or shock ought to excite fears for the result, especially when wounds have been received in such a situation as to cause us to suspect the injury of vital organs.

The necessity of immediate action on the part of the surgeon is too often imperative; it may be in

the height and tumult of the battle. The weight of his duties must, of course, depend upon the number of his associates and assistants, as well as upon the number of the wounded.

All wounds accompanied with much arterial hæmorrhage demand immediate attention, either by compression or by ligature. The former cannot safely be continued for any length of time, and the latter cannot safely be postponed very long. When the wounded or bleeding artery can be reached, immediately ligating with a single thread of dentist's silk, one or both ends, if possible, may prevent a secondary and fatal hæmorrhage — which, when it occurs, usually takes place from the eighth to the twentieth day. If such secondary hæmorrhage should occur, or circumstances prevent securing the artery at the place of the wound, if incised, it may be secured above, and future hæmorrhage be prevented by pressure from below and up to the wound. In gun-shot wounds, this compression could not be endured, and amputation would be required.

When the hæmorrhage is venous and from an extremity, a sponge tent, or compression, properly applied, may be sufficient; or if not, the vein may be tied. Compressions alone may succeed in staying hæmorrhage from wounds of the scalp, the hands or the feet; but if it does not, in the case of the hand, if the radial and ulnar cannot be tied, we may apply the ligature to the humeral artery. If compression on wounds of the arteries of the scalp is insufficient, the artery may be divided.

Should the hæmorrhage arise from the wound of

an internal organ, as the lungs, the liver, or the spleen, venesection from a large orifice, which may be repeated if needed, is our most effectual means of relief — remembering always that young recruits and the inhabitants of cities tolerate bleeding less amply than the inured soldier and the hardy yeoman ; and that venesection, except in severe inflammations of the serous membranes, congestion of the lungs and brain, and in the early stage of pneumonia, has been in a great measure abandoned.

Next to controlling hæmorrhages, the surgeon should be careful to remove, either by the wound or counter-openings, all foreign bodies, whether in the fleshy or bony parts. This, Hennen says, we should lay down as a rule never to be deviated from, so far as can possibly be accomplished with safety to the arteries, cavities and joints ; " but," he continues, " those who best know the field of battle will easiest admit how often it is impossible to do all in this respect that they could wish."

" In all our examinations," says Guthrie, " the surgeon should never forget to make a counter-pressure to the fingers with which he is searching for the ball. This is most essential in the extremities, where counter-pressure will often bring an extraneous body within the reach of the finger or probe."

In searching for foreign bodies, we should always remember that we are never to probe the abdomen or chest with any other instrument than the finger ; if the foreign bodies are readily found, they may be extracted; but we are never to persist in exploring for them. The body thus wounded should be so

placed as to insure free egress for the blood and pus. If large quantities are pent up in the cavity of the pleura, the use of the trocar and suction-pump, as combined by Dr. Wyman, may be of great service.

Should the ball have passed through the fleshy parts of either extremity, or of the body, without penetrating a cavity, or should it have been extracted, after properly cleansing the wound the simplest dressing will suffice; but should it have shattered the bones, especially in the neighborhood of the larger joints (except the shoulder*), or have entered either of the larger joints, it would require all the skill and care of the surgeon to save life with the limb, the prevention or removal of inflammation being the chief object to be kept in view. But so rarely does success follow our utmost endeavor by these means to save the limb, it is important that the friends of the patient should be informed of the nature of the wound, and the probable necessity for amputation.

As a general rule, amputation should be performed as soon as circumstances will permit, and always under the use of an anæsthetic, and a gentle stimulant, if there be much depression. The use of chloroform is absolutely forbidden in the army of the United States. This is, perhaps, unfortunate, inasmuch as the risk of combustion from ether, its greater bulk, and the saving of time from its more rapid action, affords quite an argument in favor of the for-

* See Med. Repository, New Series, vol. ii., p. 84. Mann's Medical Sketches, pp. 207, 208.

mer when skilfully used, although the preference should always be given to ether. The chief difference, in a physiological point of view, is simply this; that while ether suspends the circulation in the capillaries and smaller arteries, chloroform, when incautiously used, suspends the circulation in the larger arteries also, and in the heart itself, if continued sufficiently long. By carefully watching the pulse at the wrist, and the respiration, chloroform has been safely used in many thousands of cases, and might, with care, probably be so in many thousands more; on the other hand, ether may be safely used by the aid of any common assistant. Stimulants should always be at hand, to be used if needed, whichever anæsthetic be employed, as should also due provision be made for the proper aeration of the blood.

In wounds of the head of the humerus and the head or neck of the femur, Guthrie recommends resection, if the shaft of the bone is not irreparably implicated, which would probably happen in nine cases out of ten, where the bone is struck by a Minié ball.

Gun-shot wounds of the upper extremity, near the middle of the bones, and where the artery and nerve are not wounded, may do well under proper care and the use of the tin, wood or leather splint, properly padded and secured by the many-tailed bandage, with the limb in a relaxed and easy position, as may those of the leg; while those of the thigh, especially those of the upper third, may prove fatal under the most favorable circumstances and proper treatment. In all these cases, however

small the chance of life, amputation should be immediately performed, which will be the more successful the lower the femur has been injured.

Eugene Fenech, a French surgeon-major, says that "fractures of the thigh, accompanying gun-shot wounds, do not absolutely and necessarily require amputation." Dr. Mann remarks that "wounds of the thigh with fracture are always dangerous, and if not immediately secured by Desault's or Physick's method, the limb cannot be saved."

Severe and lacerated wounds of the ankle joint, by cutting weapons and projectiles, I have known to end favorably under ordinary treatment. Gun-shot wounds of the wrist demand amputation, and those of the hands and feet require excision of the parts injured — always bearing in mind the importance of saving as much of the hand or fingers as may be useful.

"When an opinion is formed," we quote from Dr. Mann, "that the chance of saving a limb is greater than the risk of losing life by deferring an amputation until an experiment is made to save it, to defer the operation is proper," due weight being given to all the circumstances which may tend to promote, retard or prevent a cure.

Larrey mentions four cases where consecutive amputation is required:

1st, Where there is mortification of a limb.

2d, Where there is a convulsive spasm in the wounded limb, which has not extended to the other parts.

3d, Where the suppuration becomes putrid, and

the bony fragments are enveloped in pus, and where the parts have no disposition to unite.

4th, Bad state of the stump.

Before closing the wound after any amputation, we should wait long enough to see that there is no oozing from any artery which might afterwards require a ligature, or until the parts become slightly glazed, being careful, before applying the dressings, to remove the end of the ligature and all clots, whose presence might prevent union by the first intention. The dressings should be compresses or lint dipped in cold water, and warm poultices, as suppuration comes on, especially if more agreeable to the feelings of the patient. When the parts begin to granulate, a compress and bandage will complete the cure. I would observe here, that for many years I have been in the habit of using castor oil in the place of cerates, as a ready and pleasant application to granulating surfaces.

The dilatation of gun-shot wounds should be made only when an artery is to be tied, foreign bodies to be removed, or the fasciæ to be cut to relieve the tension of the subjacent parts.

Incised and punctured wounds require to be treated on the same principles, whether in civil or military life. In bayonet wounds, Guthrie recommends "cold water at first; taking care not to apply a roller or compress of any kind over the wound, and that the matter should be frequently pressed out. When suppuration is established, a roller should be applied above and below the wound, and an evaporating poultice upon it, if cold be found comfortable,"

keeping in mind the principles of treatment, general and local, of inflammation and suppuration beneath fasciæ.

Should the scalp be extensively cut, stitches may be used, being careful not to introduce them through tendinous parts. If pieces of the skull are severed by a blow but still adherent to the scalp, the whole may be replaced; but if loose and detached, they should be taken away.

Sabre wounds of some of the larger joints, as the shoulder, may do well by simply closing the wound by stitches, adhesive straps, rest and the antiphlogistic treatment. Wounds by the sword, of the back of the hand or wrist, require a proper splint under the palm, to prevent distortion.

In injuries of the head, whether by the sword or by the missile, we are carefully to distinguish between compression and concussion. If compression exists, and we can find no depression of the skull, or even if we do, and the depression is not great, we may endeavor to remove the symptoms by venesection, purging, cold applications and blisters. If these means do not succeed, the operation of trepanning must be resorted to. The point to which we apply the trephine must be determined by the probable position of the compressing body. The operation may be performed at any part of the skull, except over the sinuses, and as early as possible after the accident, and before inflammation sets in. It should always be borne in mind, that where there is depressed fracture of the bones of the cranium, the spiculæ of the depressed bone may subsequently

induce irritation or inflammation of the brain, producing epilepsy or other disease of the organ; and that these consequences might have been prevented by a timely operation.

Wounds of the face and neck are to be treated on the same general principles as those met with in ordinary practice, taking care to make due provision for the aëration of the blood and the nourishment of the patient, as also to pick away all loose fragments of bone, and to guard against any secondary hæmorrhage.

The principles of the treatment of simple fracture and dislocations, or of the two combined, are too familiar to need any comment further than this — that in compound fractures and dislocation of a large joint, amputation will generally be needed.

In the treatment, in the camp, of all fractures except those of the upper extremity, the limb should be kept in a straight position, and the patient on the back. If the upper fragment of a broken femur is inclined to tilt forward and outward, the body should be slightly raised on an inclined plane, and the lower fragment brought into a line with the upper by carrying the lower part of the limb slightly outward.

I have always been in the habit of bandaging a fractured limb before applying the splints, and have never met with any trouble from this source. Dr. Bigelow strongly recommends its omission; and in military practice, at least where the limb cannot be carefully watched, I most cordially agree with him. It is well known that turns of the roller are necessary in order to apply it smoothly to a limb, which

is a cone and not a cylinder. For this purpose, the roller should be slackened at the moment of making the turn, and not tightened till the turn is completed, as clearly demonstrated by Dr. Bigelow.

In compound fractures, Ballingall says he "has too frequently seen a reluctance to use the saw in removing the protruded extremity of the bone, and the closure of the wound attempted by too forcible and long-continued means."

Thus much for the surgical part of my subject, in healthy persons and under ordinary circumstances. In the modifications required for bad constitutions and erysipelatous inflammation, the treatment must be regulated by the symptoms.

The universal experience of military officers fully bears out the remark of Hennen, that "There is, perhaps, no body of men more thoughtless, when left to themselves, than soldiers." By unnecessary exposure, by the indulgence of their appetites and passions, by carelessness and want of cleanliness, by the position of the camp in unhealthy or malarious districts, diseases are far more destructive than the sword and projectiles of the foe. In barracks at home, we learn from Miss Martineau's book entitled "England and her Soldiers," that "*twice* as many die as of the least healthy order of people in Great Britain. The proportion becomes aggravated abroad. Take any set of Englishmen of the same age — say between fifteen and forty-five — and you will find the annual mortality one in a hundred, from epidemic and constitutional disease, from local

disease, and from violent death collectively; whereas the deaths from these causes were, in the army in the East, nearly twenty-three per cent., only three per cent. in hospital being from wounds, while more than eighteen were from epidemic disease."

In the Crimean War, Miss Martineau says "the number of cases admitted into the hospital in January alone, was 11,290; and of these there died in hospital 3,168. Of this prodigious number of victims, all but 915 died of diseases caused by insufficient nutriment — that is, of scurvy and maladies of the scorbutic type."

From the same source, we learn that "the number of British killed in the battle at Inkermann, was 462; the killed, wounded and missing together were 2,612; the amount of sick during that month of November, was above 30 per cent. of the force in the Crimea, only 15,303 being available out of an army of 22,052."

"Under the strong excitement of active service, the soldier, well fed and clothed, and enjoying proper intervals of rest and repose," Dr. Mann observes, "and under proper protection from the elements, endures fatigues, colds, and exposure to the most threatening dangers, with impunity. Not so during the intervals of rest and inactivity. Then it is that the deleterious agents exhibit their influence upon animal life. Then it is that an army sickens from causes connected with their local position, or which originate from their own filth and imprudence." "Hence arise fevers, rheumatism, dysenteries, diarrhœa, cholera, diseases the forms of which

are governed by the accidents of position, or local causes and the seasons."

Against the occurrence of these camp diseases it becomes the duty of the medical officer to provide. And yet he should not be held responsible for the sickness which may prevail in the camp, in the barracks, or in the hospital. Others, and quite possibly the medical bureau, or the colonel, or the quartermaster, or the commissariat, may be more culpable than he.

Civil hygiene is a new science and art in England and America; how much more so, in this country, at least, is the sanitary condition or physique of an army! The importance of this subject, until quite recently, has been recognized only by the French. Although commissioners for this purpose were sent by the English to the Crimea before the commencement of the war, yet it was not, Miss Martineau informs us, until the second sanitary commission came out from England, that proper ventilation and cleansing of the barracks and hospitals were essentially set on foot.

Without doubt, the surgeon-in-chief, the quartermaster and the commissariat of the United States army, and the officers of our own State, are doing all in their power for the health and comfort of our soldiers. Notwithstanding this, a greater sacrifice of life may be reasonably feared from the removal of northern young men to a southern climate at this season of the year, than from any battle with the southern army. Indeed, our forces placed at Norfolk, Portsmouth or in Charleston, during the sum-

mer months, in an epidemic like that of 1855, would soon be annihilated, without any action on the part of the South. Too much attention cannot therefore be paid to hygienic rules for the preservation of the health of our soldiers from the North; and if we allow the popular impression to prevail, that the regimental surgeons are responsible, not only for the treatment of the sick and wounded, but for the health of the army, we ought to strengthen the force of the department by the addition of one or more medical men, as *physicians*, apothecaries or assistants, or sanitary officers, to each regiment, who shall be well instructed in the geology, climatology, topography, endemics and epidemics, of the different States of the Union.*

Too much care cannot be taken that the northern soldier be properly clad with flannel next the skin, even in summer, especially on the chest and abdomen, to prevent the too sudden loss of heat; that after a hard march, as Dr. Mann recommends, he should be obliged to cut his own wood and make a fire and cook his own food. Similar to this, according to Sargeant Jowett's diary, was the mode adopted and pursued by the English army during the first winter in the Crimea. In our armies, and with the French, the men are cooked for and fed in squads, each squad having its own cook. Great improvements in the mode of cooking and in the concentration of articles of food, have of late years been

* See the different volumes of the Transactions of the American Medical Association, and Coolidge's Statistical Report of the Sickness and Mortality of the U. S. Army.

made, which will doubtless be introduced into our armies for the benefit of our soldiers.

The employment of females as nurses, since the battle of Inkermann, has come to be deemed indispensable, in preparing food for the sick, and for the timely administration of medicine. In Catholic countries, this devotion of the Sisters of Charity to the sick and wounded is no new thing. Protestant females are now laudably following their noble example.

The soldier should be obliged, when well, to bathe daily, in whole or in part, as circumstances allow, and forbidden to expose himself unnecessarily or unprotected to the dews of the night and sudden atmospheric changes — especially when cold and moist — or to the burning rays of the noon-day sun. His food should be good and properly prepared, soup being a salutary form, especially if there be any tendency to diarrhœa; and total abstinence from alcoholic drinks be enjoined, except when employed as remedies. For drink, the soldier, when he can get it, should use hot coffee, tea or chocolate. Indeed, so valuable — in addition to keeping warm at night — did Portio, the surgeon to the Emperor Leopold I. (1683), consider hot drinks in quenching thirst and otherwise conducing to the comfort and health of the soldier, that he recommends "all commanders to order a great kettle of water to be kept perpetually hot, whenever there is a fire kindled for other purposes, for the ready preparation of hot ptisans,"*

* See Med. Repository, New Series, p. 2, for many valuable suggestions for preserving the health of the soldier.

&c. Alexander the Great is said to have lost more men from drinking (while they were heated) the cold waters of the Ixus than he lost in battle.

Strict attention should be paid to ventilation and cleanliness in the camp and in the barracks — cesspools, sinks and filth of every kind being carefully and frequently covered with a sufficiency of earth to prevent exhalations, and proper drainage should be amply provided. If wood and water be at hand, the place of bivouac, as also of the hospital, should always be, if possible, upon an elevated and dry soil, away from crowded cities or marsh emanations, and in a pure air. And it should always be recollected that change of air, as of place, is of the most healthful influence; and the removal from an impure or over-crowded hospital to one more roomy and cleanly, is often the best and only valuable remedy to be directed for the sick and wounded, especially for those suffering under hospital gangrene, for the general and local treatment of which, Thompson's Lectures on Inflammation, and Hennen's Principles of Military Surgery, may be profitably consulted.

The precise form of disease which may occur in the campaign now opening before us, and the method of treatment, it is impossible to foresee with accuracy; but those of the warm season and of warm climates may be safely anticipated, and due preparations should be made for their treatment.

These, diseases of the summer and autumn, viz., diarrhœa, dysentery, typhoid and typhus fevers, are usually the scourges of the camp. These diseases

so run into each other that they are exceedingly apt to be misunderstood and improperly treated; the protracted diarrhœa of fever being treated as simple diarrhœa, when it may depend on an ulcerated state of the mucous membrane; or this latter condition, accompanied with mucous and bloody discharges, being regarded as simple dysentery — dysenteric symptoms following typhoid fever, or typhoid fever following dysentery, as in the Crimean war and American war of 1812 — these diseases, as I once ventured to remark,* appearing to be allotropic forms of the same complaint, receiving their names from the seat and character of the diseased parts.

Whether typhoid and typhus fevers are only modifications of the same disease, is yet a question in the minds of some, while others regard the point as settled in the affirmative, the weight of the disease, as it were, falling upon different organs; or it may be that the different symptoms arise from the different conditions of the system at the time of attack — "these underlying conditions," says a writer in the British and Foreign Medico-Chirurgical Review, "constituting the great difficulty in the management of disease in the time of war." "A full description of which complex states has never yet been given; but we know of no greater service that could be rendered to military medicine, than a comprehensive medical work on the diseases of the camp and army." This same state of things is clearly discernible in the diseases of the campaigns of the American army, in

* See an Essay on Typhoid Fever, read before the Mass. Med. Soc.

1812, '13 and '14, as presented by Dr. Mann; and I know of no works which can be more profitably consulted for the treatment of the diseases of an army, on American soil, than this, and Coolidge's Medical Statistics of the U. S. Army.

As a prophylactic against intermittent fevers, quinine, in doses of two or three grains daily, has been used by the unacclimated in malarious districts, it is said, with success. It is possible this same article of the materia medica might be advantageously employed, and with the same intent, in the camp fevers of a more continued type.

We turn now from the head to the heart of the patriotic physician. The moral, like the physical powers, we all know, increase in energy and activity by exercise. Courage adds force to the muscle, while fear but depresses and enfeebles it. The cultivation of every noble and patriotic sentiment stimulates to action; and a knowledge that his property, liberty, life or independence is in danger, will render even a coward brave. In the defence of these, for himself and his posterity, the physician as a man, a citizen and a christian, is now called upon to act; and although he may not be liable to military service, I need not here say, that some of the most efficient civil and military officers in the Revolution, and in the war of 1812, were taken from our profession.

In reading Thatcher's Medical Biography, a physician cannot but be proud of the profession to which he belongs. Men with larger hearts or more generous and patriotic souls are to be found in no other

class; and I thank God, to-day, that I have the honor to be a member of the Massachusetts Medical Society, and that my humble name is to be found on the same catalogue with theirs; proud of the State that gave me birth, "whose history," in the language of Mr. Webster, "the world knows by heart. The *past* at least is secure. There is Boston, and Concord, and Lexington, and Bunker Hill; and there they will remain forever. The bones of her sons, fallen in the great struggle for independence, now lie mingled with the soil of every State from New England to Georgia; and there they will lie forever. And, where American Liberty raised its first voice, and where its youth was nurtured and sustained, there it still lives in the strength of its manhood and full of its original spirit. If discord and disunion shall wound it; if party strife and blind ambition shall hawk at and tear it; if folly and madness, if uneasiness under salutary and necessary restraint, shall succeed to separate it from that union by which alone its existence is made sure, it will stand in the end by the side of that cradle in which its infancy was rocked; it will stretch forth its arm, with whatever vigor it may still retain, over the friends who gather round it; and it will fall at last, if fall it must, amidst the proudest monuments of its own glory, and on the very spot of its origin." With Mr. Webster, let us thank God that "Massachusetts stands to-day in the accumulated blaze of her past and present glory."

In popular governments, it has often been remarked, there are periods when public sentiment outruns

that of its organic head; when the voice of the people will dictate the policy to be adopted and the measures to be pursued. Such is the state of affairs at the present juncture. Without stopping to inquire into the causes which have brought us where we are, upon the great questions of the day, the support of government and a trial of the strength of our institutions, all are agreed — there is but one mind. Government or no government; union or disunion; a republic or a military dictator; life, liberty and law, and these secured by the Constitution as it is, and above the necessity of amendment, or an inglorious existence, tyranny and oppression — these are the present alternatives, this the ultimatum. Need any other appeal be made to rouse us to action, to arm us for the conflict!

Are any of us willing to see these glorious stars and stripes, the flag of a nation respected and honored the world around, the shield and defence, under God, of all we hold dear on earth, torn into shreds and trampled in the dust by traitorous men, ambitious to rise into power upon the ruins of that magnificent structure which our forefathers reared, by their toil and courage, and cemented by their blood? Sooner than this, trusting in the God of battles, let us show the ***heartless politicians*** of the South that *surgeons* can make wounds as well as dress them, when all other expedients prove of no avail. Everlasting shame and disgrace be upon us, if we ingloriously give up the priceless inheritance left us by our ancestors. Our descendants claim from us that inheritance untarnished and entire.

Can we ignore their claim? Let us see to it, that we leave them, if we have no other legacy to bequeath, a government worth living under, a country worth living in.

The patriots of the Revolution, as we learn from Samuel L. Knapp's eloquent biography of General Warren, wore, as mottoes, maxims drawn from the republican writers of antiquity, and bore constantly in their minds some classical model of a Greek or Roman patriot. So now let us meditate upon the virtues, the wisdom and courage of the heroes of '76; for by enshrining them in our heart of hearts, it is possible we may be enabled the better to value the liberty and independence they purchased for us with their blood, and learn how and with what spirit to defend them for the millions yet unborn.

There were circumstances connected with the Revolution so completely identical with those of the present time, that I cannot refrain from alluding to them. Then, as now, great and good men mixed in the ranks with the common soldiers and volunteered their services to the country. Dr. Joseph Warren, although a Major General, was a volunteer in the fight at Bunker Hill, as was Major (afterwards Governor) Brooks, M.D., M.M.S.S., et LL.D.; Timothy Childs, M.D., M.M.S.S.; Drs. John Warren, Cutter, Rush, Adams, Thatcher, Hayward, Homans, our own John Barnard Swett, and many others, entered as surgeons into their country's service.

Our *fathers and teachers in medicine* have left us their burning words and brilliant example to show *us* what *we* ought to be. The late Dr. John C.

Warren's address at the Union Meeting, held in Boston, February 16th, 1850, was listened to with the most profound respect and regard by many whom I now address. As the patriotic and rich legacy of one of our beloved instructors, I shall offer no apology for inserting that "touching and pathetic speech," as Mr. Webster called it, in this place.

"It is not without reluctance that I appear before this great assembly to take part in the political proceedings of my fellow-countrymen. Having, from an early period of life, devoted myself to professional duties, I have not entered actively into the politics of the day; but I have never ceased to feel the deepest interest in the security and prosperity of our common country, and have ever considered, that, when these were in danger, it was my duty, as well as that of every good citizen, to devote mind and body to their protection and preservation. Such a crisis seems now to have arrived. The Union, and consequently the existence of this nation, are menaced; and, unless there is a great and general effort in their support, we may soon behold the mighty fabric of our government trembling over our heads, and threatening by its fall to crush the prosperity which we have so long and happily enjoyed.

"It has been my lot to have lived during a period when there was no Constitution and no Union; when there was no commerce, no manufactures, little of agriculture, or of any of the arts calculated to make a powerful and happy people. It was a period when there was no sound currency, no confidence between man and man, no harmony in the action of the different States. It was a period when men's hands were turned against their neighbors; when the courts were beset with armed men; when law and justice were trampled under foot; when our best towns and villages were threatened with pillage, fire and the sword; when the soil was polluted by the blood of its own citizens. I remember the unorganized little band of fathers of families, who, in that emergency, issued from this place, feebly provided with arms or with other means calculated to put down a daring and desperate rebellion. What a dark moment was this! What a dreadful foreboding arose in the minds of those who had been expending their labor, their treasure, and their blood, for the safety of an unhappy country!

"But, in the midst of this gloom, a ray of light showed itself. A Constitution was proposed, and after a cautious investigation, and careful adaptation to the varied interests of the country, was adopted as a

bond of everlasting union. Under this Constitution, a new order of things has arisen: commerce and agriculture have revived; manufactures have every where grown up; education, literature and science have been diffused in all our cities and towns; the highest prosperity has pervaded the nation, and presented to the wondering eyes of Europe the spectacle of a federal republic, free without licentiousness, and rich without luxury.

"Now, let me ask, is there any one desirous of returning to the disunion of 1786? Is there any one who is willing to trifle with, to spurn at, to go behind this Constitution? If there is, I cannot go with him. *I go for the whole Constitution and the whole Union*, as the best security for the liberties of the people. For these I stand here; and, if I am not ready to exert every faculty which I possess to uphold and maintain them, I am false to the blood which runs in my veins, false to the ancestors from whom I am descended, and false to every sentiment of my own heart. I stand, then, at all hazards, for the CONSTITUTION and the UNION, *one and indissoluble, now and forever.*"

These lessons have not been lost. Already many of our own number have caused their names to be enrolled among the volunteers now mustering for the defence of the capital and the support of government; and the number of those desirous of entering our army as surgeons is so great that the chance is but small of securing so honorable a post. Some of the gentlemen before me, who were reclining upon their well-earned laurels, I am informed, have offered their services to the State, and have again taken the scalpel and amputating knife in hand, that they may regain their former dexterity in cutting for an artery or in amputating a limb.

The gentleman, whose place I have the honor this day to fill, and who should have been your orator, is among this number; he has joined the ever-memorable 6th regiment of Massachusetts, and is now with Gen. Butler; by his example showing you to-day in *deed* what constitutes a patriotic phy-

sician, with an eloquence to which no words of mine can aspire. Dr. Gilman Kimball will do honor to himself and this Society, as a man and as a surgeon, whenever and wherever his services are needed. There is not one of *us* too old to join the veteran home guard, and who might not be able, in a short time, to renew the knowledge he once possessed, and do good service, at least, at home. Indeed, any good practitioner of medicine, even if of limited surgical experience, whose services may be needed, may be a very desirable accession to any forming regiments; and whenever the history of this day is written, I feel that I hazard nothing in saying, that the escutcheon of the Massachusetts Medical Society will shine with a new lustre, and that many a new but noble name from her list will be added to those already inscribed upon the roll of everlasting fame.

LIST OF DECEASED MEMBERS.

Admitted.	Name.	Residence.	Age.
1810	Ephraim Stone	Harvard	89
1818	William Parkhurst	Petersham	77
1818	William Hooker	Westhampton	94
1822	Woodbridge Strong	Boston	
1829	Horatio Adams	Waltham	60
1831	Paul Simpson	Boston	
1838	Samuel Taylor	Petersham	50
1839	Jos. Jas. Lloyd Whittemore	Scituate	49
1839	Daniel Mowe	Lowell	70
1841	Thomas B. Wales	Randolph	38
1841	William Greene	N. Falmouth	
1841	John Hoyt	Natick	43
1842	Horatio Thomson	Belchertown	57
1846	Jesse Merrill	Hopkinton	66
1847	Benjamin Heywood	Worcester	39
1848	William Williams	Salem	63
1848	Daniel S. Allen	Hamilton	
1853	Ephraim Knapp	Attleboro'	80
1854	Horace Walter Adams	Boston	33
1854	Charles D. Dowse	Waltham	48

OBITUARIES.

Since our last Annual Meeting, twenty members of this Society are known to have departed this life.

These, our former associates and friends, will have no account to render of the duties flowing from the momentous crisis now upon us; and in contemplating their departure we are reminded of Cicero's remark on the death of Quintus Crassus, which seems now peculiarly pertinent to them.* *"Fuit hoc luctuosum suis, acerbum patriæ, grave bonis omnibus, sed ii tamen rempublicam casus secuti sunt, ut mihi non erepta L. Crasso a diis immortalibus vita, sed donata mors esse videatur."*

* Cicero de Oratore. Lib. tert., p. 2.

EPHRAIM STONE.

EPHRAIM STONE, formerly of Harvard, Mass., died in Boston, after a long and painful illness, June 26, 1860, aged 89 years and 6 months.

Dr. Stone's long professional life was spent principally at Harvard. By his skill as a physician he won the confidence, and by his many virtues the esteem, of the community in which he lived; and when the weight of years pressed upon him, he retired from the field of his active labors amid the sincere regrets of his fellow citizens.

WILLIAM PARKHURST.

WILLIAM PARKHURST died at Petersham, Februrary 13, aged 77. The following sketch of his life appeared in the Christian Register, published in Boston, March 9, 1861.

"Two days previous to his death, he made several professional visits, and returned to his house to pass a cheerful evening with his family. Retiring at his usual hour, a short time after he had an attack of paralysis. He remained in a state of unconsciousness till his spirit left the body.

"Dr. Parkhurst was born in Hubbardston, February 14, 1784. He pursued the study of medicine with Dr. Whiton, of Winchendon, where he commenced the practice of his profession. In 1810, he married Ruth Sylvester, of W., and soon removed to New Salem, where he remained till 1815. He then became a resident of Petersham. Not more than a year or two after, he buried his wife, by whom he had three children, two of whom died in infancy. In 1817, he was again married to Hannah Bigelow, by whom he has had eight children, and who survives her lamented husband. Four of these are living. One (Daniel) was educated for the ministry, and settled over the Unitarian Society in Deerfield. He preached there but four Sabbaths after his ordination, when his health failed, and he sank into an early grave, deeply lamented by his parishioners and numerous friends.

"During the practice of his profession, Dr. Estabrook, of Camden, Me., and Dr. Osgood, formerly of Templeton, now of Greenfield, both distinguished physicians, were under the instruction of Dr. Parkhurst. He was the first President of the Worcester North Medical Society, which office he held for several years, and but recently resigned. He was also the first President of the Worcester County West Agricultural Society, for which position he proved to have peculiarly desirable qualifications. For about forty-five years he held the office of Deacon in the First Congregational Church in Petersham. As a physician, citizen, neighbor and Christian, he enjoyed in an eminent degree the confidence and esteem of all who knew him; and his decease,

although his gradually failing health had for some time given warning of its approach, has cast a gloom over the community in which he dwelt. Those to whom his stately form and dignified presence, his genial manner and agreeable conversation were familiar, will long retain pleasant remembrance of him. There is sorrow in the household which his departure has left desolate, but there is rejoicing also in the hope of eternal life, and a happy reunion above."

WOODBRIDGE STRONG.

WOODBRIDGE STRONG died in Boston, April, 1861.

The death of Dr. Strong was an event not unexpected. We gather the following sketch from a biographical notice by an acquaintance, in the Boston Medical and Surgical Journal of April 11th.

"He had been failing in health for two or three years past from a chronic cerebral affection, which incapacitated him for the practice of his profession, and which at last proved fatal. He may be said to have ranked among the oldest practitioners of Boston, and for many years to have had a fair share of professional business, both medical and surgical.

"He was a pupil of the late Prof. Nathan Smith, whose confidence he possessed to an unusual degree. He had moral and intellectual qualities which will be remembered by all who knew him. He was a man of great decision of character and self-reliance. His voice was gentle and low, and his manner singularly quiet. He was a student in books and at the bed-side; and his statements of disease showed you he had not studied in vain. You might question his theory, but you could not deny its reasonableness. His doses were absolutely fabulous. Disease was to him a giant, for it could subject giants to itself, and he attacked it with gigantic remedies in gigantic doses. His was not an expectant *faith* in which nothing is *looked for*, and so nothing is done. He had on his armor, and was ready to do battle in the service for which it was worn, and battle he did. Dr. Strong was not without professional respect and kindness. His doctrines made him no enemies. He was a member of the Boston Society for Medical Improvement. He was long a Councillor of the Massachusetts Medical Society, and a faithful Treasurer."

JOSEPH JAMES LLOYD WHITTEMORE.

JOSEPH JAMES LLOYD WHITTEMORE, a native of Scituate, died at Amiens, France. He was a graduate of Harvard in the class of 1832, and for sixteen years a resident of Rio de Janeiro. Age, 49.

HORATIO ADAMS.

HORATIO ADAMS was the son of the late Rev. Solomon Adams, of Middleton, Essex County, Mass., and was born February 20th, 1801. He was not educated at any College, though he was admitted to the honorary degree of Master of Arts, in Harvard University, late in life. He had, however, gone through the requisite previous education before he engaged in the study of medicine. He began this study in 1823, and the result showed that he was diligent while engaged in it. He was at first under the care of Dr. Merriam, of Topsfield, but the last of his three years was passed in the study of Dr. John C. Warren, of Boston. In 1826, he was graduated Doctor of Medicine in Harvard University. Immediately afterwards, he engaged in practice at Waltham, where he remained till the period of his decease.

Dr. Adams entered into practice without any flourish of trumpets. His deportment was always modest; at the same time he showed himself to be a man of sound mind and of a firm character. It was obvious that he was prepared for his work. He was made known to some of the principal inhabitants of the town, and among them to Dr. Samuel L. Dana, who had been engaged for several years as a medical practitioner in Waltham, but who had relinquished his practice that he might take the charge of a chemical laboratory. Being satisfied as to Dr. Adams's qualifications, Dr. Dana recommended him to the good people of the town, and not long afterwards showed his confidence in Dr. A. by consulting him in a very important case in his own family. Under such auspices Dr. A. soon found abundant occupation in his new home. He soon acquired the confidence of those who employed him, and there were very few instances, if any, in which he lost that confidence.

He was a diligent student of medicine. He showed skill and sound judgment in the investigation of his cases, allowing himself time for deliberation. Hence he very rarely failed in making a correct diagnosis. In his treatment he was so skilful, so kind and so watchful, that he almost uniformly gave satisfaction to his patients. This may be said most especially in respect to those, whose general knowledge and culture enabled them to judge most correctly.

Dr. Adams was the author of two papers, which will long remain as testimonials of his professional knowledge, and of the care and fidelity with which he conducted his scientific inquiries. One was "On the action of Water on Lead Pipes, and the Diseases proceeding from it." This was published in the Transactions of the American Medical Association, Vol. V., in the year 1852. I am not acquainted with any publication on the same subject, originating in this country, which can be compared with this, in regard to the history of the diseases produced by lead and their treatment.

The other article, referred to, related to the vaccine disease. This was made the subject of the Annual Discourse before the Massachusetts Medical Society, which Dr. Adams delivered in 1858. This discourse contained some valuable statements in respect to vaccination and re-vaccination. It also contained an account of some successful experiments, which the author made by inoculating a cow with variolous matter, and thus deriving virus from a new source, for the production of the vaccine disease in the human subject. This added one more experiment to a few previously made, which make it probable that the disease in the cow has its origin in the small-pox of the human subject. From the virus furnished by Dr. Adams, the vaccine disease was produced by several physicians in this vicinity. It was not thought, however, to be superior in any respect to the virus previously in use among us.

For many years Dr. Adams was a Councillor of the Massachusetts Medical Society. He was valued by all who knew him, as a good citizen and a good man. These are not words of course. He had not any ambition for civic distinctions; but he always performed the duties which he owed to society in an exemplary manner. It was by its fruits that he evinced a Christian spirit. Most happy in his domestic relations, he did his share to make his home such as every man of pure taste and sound morals would desire. Through life he was distinguished by the soundness of his judgment, as well as by the utmost kindness of his manners.

Dr. Adams was a man of an average height and well formed, and generally had good health. Occasionally, however, he was dyspeptic. In 1855, he had a severe rheumatic fever; but with that exception, he was very rarely prevented from attending to his professional business until his last sickness. This was a hemiplegia, and occurred in the month of November, 1860. He had experienced some slight symptoms of paralysis in the month of August, 1859, while on a journey from Virginia to his own home. He recognized the character of these symptoms instantly, and took measures accordingly. He was occasionally reminded of the disease from this time, but had not any important attack until the period above named.

From that period the disease continued, mitigated at times, but ultimately proving fatal on the 22d of April, 1861. Until near its termination, his mind retained its powers much more than usual in cases of the sort; although, for the first few days, the powers of speech were seriously impaired. He understood his situation, and looked at it with calmness, ready to submit entirely to the will of his Maker.

The above notes are grounded upon an intimate acquaintance with the subject of them from the year in which he commenced business.

J. J.

SAMUEL TAYLOR.

SAMUEL TAYLOR died at Petersham, of pneumonia, December 24th, 1860, aged 50.

Dr. Taylor was born in Heath, Franklin County, Mass., February 23d, 1811. He worked on his father's farm — meanwhile attending to his studies — till the age of fifteen or sixteen years, when he applied himself more determinately to study, especially of the classics and mathematics, under the notice of the Rev. Mr. Miller, of his native town.

At an early age, he commenced school-teaching, in which he was eminently successful, evincing the same characteristics that were shown in his then future profession — *originality*, and peculiarity of thought and method. I cannot say where or with whom he commenced the study of medicine. He attended Medical Letures at Hanover and Pittsfield, and graduated from the Berkshire Medical School, in December, 1835, and went to Petersham, Mass., on his following birth day, February 23, 1836, where he remained in the practice of his profession until his death, a period of twenty-five years.

In 1841, he married Miss Olivia K. Lincoln, who with four children is his survivor. I cannot but think that the mental and professional characteristics of Dr. T. were not generally appreciated or understood. His *idiosyncrasies* stood in the way of a knowledge of his best gifts. Assuredly he was a man of deep and earnest thought, many sided and catholic in his spirit. If sometimes he was persistent in the maintenance of his opinion when it conflicted with others', it was because he had reasoned up to it by a course that he felt was correct and irresistible. He was of ready invention, and both from pressing necessity and as the result of continued thought and reflection, has suggested and devised means and instruments that in my estimation were worthy of the notice of the profession.

Neither his dress or *ad*dress was courtly, but there was a heart of tenderness beneath a rude exterior — a beautiful, refined delicacy of feeling. Of his immediate intercourse with his professional brethren I know nothing, though I can understand, I think, that it may not always have been of the most pleasant character; that *here* his peculiarities might intrude offensively; but I *can* say that he spoke of them in a becoming manner, even of those who stood over against him in the way of antagonism. An article in the Boston Medical and Surgical Journal, on the philosophy of mesmeric manifestations — thrown off hastily, and written at an early period of the movement — shows something of the working of his mind. I am by no means sure, though not accepting his explanation of the phenomena, that anything since projected, however elaborate, rests on a firmer basis.

Dr. Taylor was a good man in his house; kind, affectionate and attentive to the highest welfare of his children. His weak side — and it *was* weak — was superficial; his strong — and it *was* strong — was profound and worthy.

The foregoing sketch was furnished the writer by an intimate friend and neighbor of the deceased. More scarcely need be added.

The writer often had occasion to meet Dr. Taylor in consultation, and always with pleasure and profit. His examination of a case, his theory in regard to it, and his treatment, all indicated much originality and fertility of resource. He had remarkable faith in the power of medicine, and unlike many practitioners of the present day, his confidence in this particular never seemed abated. He was accordingly in the habit of employing full doses, and in favor of a more active treatment than most of his fellow practitioners. On one occasion, when called to prescribe for him, he desired that the treatment employed in his own case should be "what I would make use of in the case of a stout Irishman in the same situation" — showing more decidedly his faith in the use of medicine.

During the early period of his practice, his health was poor, and for a time he was supposed, not only by his friends but by himself, to be in confirmed consumption. He always believed, as he often said, that he was cured of this disease by the use of emetics of tartarized antimony. In after years, his appearance was robust, and his countenance florid. He was subject to occasional attacks of bilious disease, attended with violent pain and jaundice. In these attacks, he was accustomed to make use of the freest vesication, employing, in the course of the paroxysms, blisters of very large size, and repeating them frequently. The last and most severe of these attacks occurred in the spring before his death, and apparently came near being fatal. He had strong convictions that he could not recover, and, in view of his death, remarked, that though he could not die in ecstacy he could die in peace. His appointed time, however, had not quite come, and he recovered, resuming in a few weeks his professional duties. Through the season, and until his last sickness we believe, his health was nearly as good as usual, and he continued to attend to his practice. The disease of which he died (pneumonia) was of less than two weeks' duration.

G. D. C.

DANIEL MOWE.

DANIEL MOWE died at Lowell. He was a member of the Middlesex North District Medical Society. At a regular meeting of that Society, November 28, 1860, his colleagues paid a tribute to his worth in the following resolutions: —

"*Resolved, First*—That in the death of Dr. Daniel Mowe, an old and respected member of the Middlesex North Medical Society, we have lost an associate who was ever honorable and upright in character, kind and courteous in professional intercourse, correct and exemplary in life and manners, a safe and intelligent counsellor, and an always true and steadfast friend.

"*Second*—That inasmuch as his best working years were devoted to the interests of this community, so here his memory should ever be held precious, as that of one who, after a long and useful career, has left a bright example of an upright Christian life."

HORATIO THOMSON.

HORATIO THOMSON died at Belchertown, October 5, 1860, aged 57 years. We extract the following from a biographical sketch prepared for the Boston Medical and Surgical Journal by Rev. A. G. Oviatt: —

"Dr. Thomson was born at Tolland, Ct., October 7, 1803, and was the son of Dr. Gurdon Thomson. He studied medicine with his father and elder brother of Fairhaven, Ct. He graduated at Yale Medical College about 1826, and immediately commenced the practice of medicine in Tolland, his native town. He moved to Belchertown in 1828, where he resided and continued in the practice of medicine till his last sickness. In his profession he was largely successful, and had a very extensive practice. He was a man of high honor and unbending integrity, and enjoyed the perfect confidence of his medical brethren, as also the confidence and affectionate regards of the community in which he lived.

"Dr. Thomson was a man of few words, remarkable discretion and sound judgment. In all his relations he so demeaned himself, that he commanded universal respect. He was a citizen whose word and motives were never called in question. He was a firm supporter of morality and good order, and always ready to bear his part in every safe undertaking to promote the public good. He was a member of the Congregational Church in Belchertown twenty-nine years, and as a Christian was cheerful and constant in the discharge of duty, and set an example of piety worthy of imitation."

WILLIAM WILLIAMS.

WILLIAM WILLIAMS died at Salem, June 17th, 1860, aged 62. He was distinguished for his devotion to his profession and his patients.

HORACE WALTER ADAMS.

HORACE WALTER ADAMS died on Sunday, Feburary 17, 1861, at his father's residence, in Boston. His disease was reported to the City Registrar as "pseudo-membranous disease of the throat." A detailed and very interesting account of his last illness, carefully prepared and read before the Boston Society for Medical Improvement, by his attending physician, Dr. Francis Minot, may be found in the Boston Medical and Surgical Journal of March 7th.

Concerning Dr. Adams the Journal remarks: "A contemporary truly says of him — 'His good humor, warm heart and wide information made him a universal favorite, and he has passed away, leaving a void in his own family which can never be filled, while by society, to which he was an ornament, his death will be received as a peculiar privation. Few persons more enjoyed life or were more capable of enhancing the enjoyment of others, and our own regrets mingle particularly with the mourning of those, who, though bowing to the dispensation, cannot cease from lamenting the bereavement.'"

REMINISCENCES OF FEVER.

BY HENRY C. PERKINS, M.D.
OF NEWBURYPORT.

At this day, when exactness is regarded as one of the most essential requisites in scientific research, it is a matter of regret that general impressions rather than reliable figures should of necessity serve as the foundation of the following remarks upon fever; for although the facts may have been correctly observed and honestly attempted to be weighed and reported, it must be confessed they have not been numbered, and are garnered only from recollection.

The field of the following observations lies, for the most part, on the south-western bank of the Merrimac River, on a gentle, gravelly slope, commencing at its waters and rising gradually to an eminence sufficient to command an enchanting view of the ocean from Cape Ann to the Isle of Shoals (nearly opposite the mouth of the Piscataqua), on the one hand, and a lovely and well cultivated country, interspersed with wooded hill and dale, from the hills where Parker and his associates first settled in the south, to the rolling grounds of the Indians' Powow in the north-west — constituting a part of that picture which has been pronounced by one of America's most distinguished travellers (Bayard Taylor), as he stood upon Powow, "for quiet beauty one of the most delightful views he had ever seen."

Thus situated, although the inhabitants of the ridge and the slope have wafted over them almost daily by the west-

ern breeze the exhalations of the occasionally moist plains just below, their own premises are kept sweet and clean by every summer shower, which conveys, whether they will or no, all decomposing animal and vegetable substances to the river.

The city of Newburyport and neighboring country are shaded by ancient and lofty trees, affording a salutary shelter from the scorching heats of summer to the inhabitants—an industrious, frugal, temperate race, who occupy tenements antique but comfortable, and whose habits and employments are, in the main, of a most healthy character — so that the chief thing to be feared by them on the score of health is the multiplicity of their doctors, who are to be fed "by hook or by crook," by sugar plums or lobelia, by science or by craft.

The residents at the north-western extremity of the ridge (Belleville) were visited by fever in the fall of 1827. The fever was very severe, and in many instances proved fatal — no less than nineteen heads of families being lost that year to the parish at Belleville. In the autumn of 1828, dysentery, like a slowly rising cloud, overshadowed the north-western part of the town and the low land to the south-west; but whether there was anything remarkable in the preceding season or during the prevalence of the disease about to engage our attention, we are left without the means of determining. Indeed, the origin or *remote* cause of fever, unless it be found in animal or vegetable decompositions, or in the atmospheric fauna or flora, or in the condition of the dew-point or relative moisture and temperature of the air, seems to be now no less in the dark than ever. To the temperature and relative moisture of the air, inquiring minds have within a few years past turned attention.* Not only have the deadly fevers of the Af-

* See Braithwaite's Retrospect, No. xxxiv., pp. 18, 19.

rican coast and rivers been supposed to be engendered thereby, but those of our own warm regions are regarded by a diligent and observing meteorologist, Dr. Barton,* as being directly and intimately connected therewith, if not dependent thereupon. The hygrometrical observations now in progress over a large portion of our territory, may ere long furnish decided evidence upon the value of this element in etiology.

The fever thus presenting itself in the western part of our horizon, gradually extended to other localities, being no longer confined to the ridge, but here and there to be met with, year after year, in the less elevated streets and lanes of the city, or in its neighborhood; one case only in a street, or several members of the same family, being down with the disease in the same house and at the same time; thus sparsely or more profusely dotting over our territory. One locality (Ring's Island, lying to the north-east of the city and separated from it by the river, which at this spot is not more than a quarter of a mile wide) was remarkably exempt. On this island (the residence of some two hundred or two hundred and fifty inhabitants), elevated some twenty feet above high water, and nearly surrounded by salt marshes, but five cases of fever within the last thirty years can be recalled to mind; while in one other locality of stagnant fresh water, where the land had in part been recently drained (as at the western base of Pipestave Hill in West Newbury), "in three houses, every inmate, twenty-four in number, was taken down with fever in 1829; and of the watchers or those in attendance upon the sick, who remained three days upon the spot, nine sickened, furnishing thirty-three cases and three deaths."† Of the sick, those who were removed to the more elevated part of the town all convalesced and recovered.

* See Barton's Report on Epidemic Yellow Fever at New Orleans, p. 294.
† Dr. Dean Robinson.

Unaccustomed exposure to the weather in some instances, in others unusual fatigue or anxiety and protracted watching, appeared to be the *exciting* cause; while in one or two cases no other explanation of its occurrence appeared more plausible than that it might have been conveyed by the physician himself.

The mode of attack was in many cases so gradual that it was for a time somewhat difficult to determine precisely under what disease the patient was about to suffer. In general, however, the cases were readily recognized, *not* by any chill (which was extremely rare) followed by heat and sweating, but by the stupid headache or vertigo, the clouded aspect, the soreness or lameness of the eyes, the pains in the back or limbs, the sensation of fatigue, the white-coated tongue gradually becoming brown or black and dry, the sordes on the lips and teeth, the nausea, want of appetite, the thirst, anxiety or oppression about the præcordia, the weak and slightly accelerated pulse, the gradually forming paroxysm of fever, accompanied at night by disturbed sleep or wandering intellect. In some there was no headache, but dulness and sleepiness, with a tremor about the muscles of the mouth and limbs (resembling that seen in hard drinkers), with loss of appetite and diarrhœa.

With the exception of two cases (one of which was ship-fever and imported, the other typhus having the measly eruption), fever, as seen by the writer on the banks of the Merrimac from September, 1830, to the present time, June, 1857, has been the typhoid of Louis, exhibiting, during its progress, the rose-colored spots or pimples, the sudamina, the diarrhœa, tympanitis and abdominal hæmorrhage, together with the usual nervous symptoms, deafness, coma, delirium and subsultus tendinum — arriving at its acme, or crisis, generally in about three weeks, and consuming about the same time in convalescence; commencing in the latter months of summer and running through the autumn until

checked by the frosts of winter; cases of fever occurring in the winter months being about as rare as dysentery, which disease, whether an allotropic state of fever or not, it may be here parenthetically remarked, as has been observed with the malignant fevers of warm climates, repeatedly occurred, as it were, in company with fever, being most prevalent and severe during the same years and months when fever was most rife. This appears the more interesting from the fact that the very locality, which in the summer and fall of 1820 furnished Dr. Bradstreet some of the most marked cases of bilious remittent, supplied in 1838 some of the best marked examples of the common continued fever of Dr. Jackson, or the typhoid of Louis, and that too in the same months of the year, August, September and October.

The character of the fever was, in by far the greater number of cases, not very malignant, a very large proportion terminating in health, which in many instances was indeed better than before the attack; and with the exception of a single case, the previous occurrence of the disease seemed as effectual a prophylactic as vaccine to variola. So far as memory serves, in every case that proved fatal, the fever assumed a more malignant or typhus aspect; the countenance becoming livid, the conjunctiva injected, the tongue black and dry, or red and glazed, and the lips and teeth loaded with sordes; the throat in several becoming covered with a pultaceous substance, white at first, but gradually getting dark, and coma, or convulsions, or both, and involuntary discharges and abdominal hæmorrhage closing the scene.

As has been remarked by others, the headache, the most annoying symptom at first, rarely continued longer than a week or ten days, and was generally most severe during the hot stage of the fever. Hæmorrhages from the nose or bowels were of frequent occurrence; the former in the

earlier stage, and the latter coming on at a later period, and thrice proving fatal on the twenty-fifth day of the disease. Watchfulness and a talkative delirium (strongly reminding one of the delirium a potu) is recollected as occurring in several females of nervous temperament, as an obstinate, annoying, and unpromising symptom.

The fever, during its prevalence from 1830 to 1853 (since which period it has become rare), was remarkably prone to relapse, requiring on the part of the medical attendant, in regulating the diet and regimen, the greatest caution to prevent its occurrence; which, notwithstanding, took place in repeated instances, taxing to the utmost the skill and patience of the practitioner to conduct the disease to a fortunate result.

The liability of the sexes, here as elsewhere, was about the same, while youth and old age seem to have furnished a certain exemption — the greater number of cases occurring between the ages of eighteen and forty — the majority, it is believed, being under thirty years of age. During nearly thirty years' practice, I have met with but one case of typhoid in a child, and that the last week.

The *proximate* cause of fever, so often regarded as settled, is again beginning to be doubted, and the followers of Louis may yet find themselves as unexpectedly supplanted by the humorist, as the disciples of Clutterbuck, Cullen and Brown were by those of Broussais, for although the inflamed and ulcerated glands of Peyer and Brunner undeniably have been found in a majority of cases, this condition of those glands can no longer be regarded as the essential or diagnostic element of typhoid fever,* since the same condition has been repeatedly found in other diseases, especially among children, exhibiting no other sign of fever; and unless the humorist in his increase or diminution of fibrine

* See Watson's Practice, p. 946.

(whichever the case may be),* or the solidist in a diseased condition of the ganglionic system, should succeed in demonstrating its *vera causa*, this is as yet as much unknown as ever. An unhealthy condition of the blood is admitted by Andral and other pathologists, and to this condition I may be permitted to state, I have, from an early period of professional life, looked as containing the seeds or elements of fever — inasmuch as this fluid pervades every organ and tissue of the body, and this alone is, so to speak, the pabulum of life, and its normal condition the *sine qua non* for healthy innervation, nutrition and secretion; a cause sufficient for all the consequences of fever, which, in our judgment, is more than can be truly said of the diseased intestinal glands, which, many are now inclined to regard as a consequence rather than a cause, except in the production of diarrhœa, and in some instances, perhaps, of hæmorrhage or fatal peritonitis.

Whether this abnormal state of the blood is to be attributed to want of elimination by the lungs and skin, in consequence of the high temperature and saturated condition of the air with moisture, or to the action of substances introduced from without, aggravated by the rapid decompositions going on within the unhealthy body and the want of accustomed ingesta, is a matter as yet undecided.

The other consequences, or effects, of fever upon the different organs of those who have succumbed to it, have been so faithfully and minutely recorded by Andral, Louis, Jackson, Hale and others, that we pass by its pathology with this comment only upon the blood — that, to our inspection, this fluid has seemed as unhealthy as any other microscopic appearance noticed, looking darker or more carbonized than natural, conveying the impression of putridity or partial decomposition.

---

* Braithwaite's Retrospect, No. xxxiv., p. 63.
" " xxxii., p. 22.
" " xxxiii., p. 21.

Upon the treatment of fever I have somewhat more to say. In early life, when called upon to prescribe for this affection, active remedies, in the form of gentle emetics and alterative cathartics, were employed as early as possible, in the hope of jugulating the disease. In the opinion of my immediate predecessors, these impressions, or shocks, were believed to be of positive advantage. To them it did not appear essential what means were employed, provided the shock was decisive.* This expectation, experience soon taught me was futile, and I began to suspect my own skill in the use of drugs as the cause of failure in throwing off the fever. An operation, by the way, now that there is none to throw off but subjectively, undertaken only by those who use potent and impotent medicines in such doses as may suit not so much their convenience perhaps as their pockets, and who probably are about as efficient in accomplishing this result as a specialist I have heard of who removes *his cataracts* through the nostrils by sternutation. I then had recourse to alteratives, endeavoring, if possible, to induce a *new* in the place of the *morbid* action going on in the system. In this, I thought myself more fortunate, the febrile exacerbations subsiding as the mercurial action became more apparent; so that with the gums gently touched, the management of the case was considered easy, and unless some untoward accident supervened, the patient was regarded safe. This had been the main reliance of my seniors in practice, insomuch, that when this course proved insufficient, the failure was at once set down to a change in the form or type of fever, or to the manufacture of calomel. The laws which govern chemical combinations, however, are believed to be unchangeable, and the production of a gentle ptyalism is now regarded as the result of a yielding on the part of the disease rather than the cause of such

* Dr. Bradstreet's Address. Mass. Med. Com., vol. iii., p. 298.

favorable change itself. And yet, gentle emetics of ipecac., and alteratives, as a few grains of calomel followed by castor oil, at the commencement of fever, without doubt are of service, especially if the patient has lived as usual up to the time of the first visit, or if there be nausea or oppression at the stomach. Neither should alteratives be entirely discarded in the subsequent treatment, inasmuch as they too are frequently of use in restoring the secretions and helping to clean the tongue — the tincture of the oxymuriate of mercury, in the later stage, and where the tongue was not red, occasionally coming in well as a tonic and alterative where others might not be safely administered.

As a palliative for the headache and local congestions within the head, local bleeding from the temples, rubefacients to the extremities, blisters to the nape of the neck, and refrigerants to the scalp, have proved of decided advantage. The oppression at the præcordia has been successfully met by the camphor emulsion; absorbents, as chalk or hydrargyrum cum creta, with small doses of an anodyne, or anodyne injections, have often controlled the diarrhœa, unless abdominal tenderness was present, when vesication has been found of more avail. This latter remedy has occasionally checked the hæmorrhage likewise, but if not, or when very profuse, pounded ice,* in a bladder, laid upon a folded napkin, spread over the abdomen, has been at once successful, as have been the spirits of turpentine and sugar of lead (according to the testimony of medical friends) when the hæmorrhage was decidedly atonic.

To relieve the tympanitis, mechanically opening the sphincter ani by the pipe of the syringe, or stimulating embrocations to the abdomen, were resorted to with more or less benefit.

For the wakefulness of the earlier stage, extract of let-

---

* Suggested, in a conversation, by Dr. A. A. Gould, of Boston.

tuce, and for the nervous irritation of the later stage, attended with a low muttering delirium, camphor with opium, or Dover's powder, have been found beneficial; as was musk in one very obstinate case, and laxatives in another. Refrigerants internally and sponging with tepid or cold water, were not only grateful but salutary in mitigating the thirst and heat of fever — taking care during its entire course to keep the bowels in a soluble state by laxatives or laxative enemas, and the diet and regimen carefully regulated, and the patient faithfully watched — these last means being, perhaps, the most important items after all in the successful management of this disease. But the great trial of judgment and skill (notwithstanding what has been said of the sounds and impulse of the heart, and the symptoms of collapse so clearly laid down in the books) consisted in the administration of tonics and stimulants at the proper time. So suddenly did symptoms of collapse occasionally supervene, that the use of stimulants and tonics, which an half hour previously one would have feared to employ, was now most imperatively demanded. Indeed, it was not safe to omit having all things ready, and strict and full directions left with the nurse or friends when they should be resorted to, in case the physician was not at hand, or readily to be consulted. And yet, as Dr. Nathan Smith long since said, "Typhus fever" (our typhoid), "like the other contagious diseases, has a natural termination, and if it does not end fatally, exhausts itself and disappears" — especially, it might be added, if mild in character, and treated on a judicious expectant plan, appropriately meeting any local inflammations which may arise. By far the larger number of cases witnessed by the writer were of this mild form, where the patients expressed themselves as "comfortably sick," passing safely through the complaint with confinement to bed in clean, airy, and well ventilated, but darkened apartments, sustained by a bland, farinaceous diet, and encour-

aged by the hope of a safe deliverance, not a dollar's worth of medicine being needed in the treatment of many cases from beginning to end; unless, as has already been intimated, some error in diet or regimen was committed by the patient or his friends, when relapse was sure to follow, to the great discomfort of the physician, who may be thus doomed to see all his watchful care unrequited, and his anxiety for the welfare of his patient renewed, when he had just begun to breathe freely and easy, expecting soon to see him abroad; but the patient is now to learn from his own sad experience that fever can, by one imprudent step, be rekindled, himself to become sicker it may be than before, should he be so fortunate as eventually to recover.

In all cases where there was (about the end of the third week) an amendment evinced by the cessation of the febrile paroxysm, diminution of the frequency of the pulse, and a cleaning, moist tongue, with returning appetite, the infusion of mild bitters, as chamomile, or serpentaria, with the addition of tincture of quinine, followed by cascarilla and bark, aided in restoring the lost tone, and promoting the patient's strength, assisted by a diet gradually improved by uncooked or boiled milk, or cream, pounded biscuit, rye-pudding, or soft-boiled rice, soft-boiled eggs, or oysters, and the lighter meats, in the order here enumerated, and in moderate quantities, until convalescence was firmly established, when the patient was fully cautioned as to exposure to the weather, and left to make good his recovery.

The preceding remarks are of so general a character, and the speculations offered so devoid of any novelty, that they may be regarded as scarcely worth the time which has been consumed in their recital. They have been framed, as well as penned, amid many cares, and are offered chiefly to show the willingness of the writer to comply with the invitation to contribute his mite, however small, to the gene-

ral stock of human knowledge; and because an opportunity was thus offered to draw an outline of fever as exhibited in a part of the Commonwealth not heard from on this topic for the last thirty years. They are submitted with diffidence, heightened by the remembrance of the finished essays and elaborate reports which have heretofore been presented by the masters of our art. But the private who has stood at his post, no less than the General who planned the attack, cannot but occasionally reflect upon the scenes through which he may have passed, and may be permitted to rehearse the manner in which he has met the foe; and if he has faithfully discharged his duty, may confidently rely upon the candor of his comrades to mete out to him the merit he deserves.

ARTICLE II.

TOPOGRAPHICAL DISTRIBUTION AND LOCAL ORIGIN OF CONSUMPTION IN MASSACHUSETTS.

BY HENRY I. BOWDITCH, M.D.
OF BOSTON.

READ AT THE ANNUAL MEETING, MAY 28, 1862.*

MR. PRESIDENT AND GENTLEMEN:

AT this dark, but, as I deem it, most glorious epoch in the history of the Republic, and while hosts of armed patriots from all the loyal States are gradually and firmly encircling, as with a wall of fire, the traitors to our country's peace, we—as one small corps of that grand army, whose

"duty is to save"—

have again met, on this our annual festival, for fraternal interchange of thought on topics connected

* At an Adjourned Meeting of the Mass. Medical Society, held Oct. 3, 1860, it was

Resolved, "That the Massachusetts Medical Society hereby declares that it does not consider itself as having endorsed or censured the opinions in former published Annual Addresses, nor will it hold itself responsible for any opinions or sentiments advanced in any future similar addresses."

Resolved, "That the Committee on Publication be directed to print a statement to that effect at the commencement of each Annual Address which may hereafter be published."

with the science or art of our noble, but peaceful profession. The heart of the Nation is in mourning for her soldiers slain in the beauty of their young lives and of their heroic deeds, on the battle-fields of our common country. We, too, lament the loss of many of our well-known and respected fellow soldiers in the battle of life, who, since our last gathering, have left our ranks only to join the mightier hosts of the dead. A few moments spent in commemoration of their virtues will tend to hallow this hour, which, year after year, we devote to professional discourse.

Not less than twenty-seven of our number have died during the past year; a larger number than has ever been known before within the same period of time. Most of them filled, to the entire satisfaction of the various communities in which they lived, the sacred office of Family Physician. They need no higher or sweeter eulogium; for that office, worthily filled, carries within itself as rare a combination of virtues possessed and of duties done as usually falls to the lot of man.

I shall not, I hope, be deemed unjust to the memory of others, or as using the language of unmeaning panegyric, if I allude more distinctly and personally to two of them; one of whom was but recently our President, while the place of the other as Secretary has become vacant only within the last few weeks. As officers of this Association, therefore, if for no other reason, we owe to their memories, at the present hour, our tribute of respect.

Dr. LUTHER V. BELL* was a member of a family in New Hampshire, illustrious for its talents and for the high positions held by it in the service of the State. After a brief career as a practitioner of medicine in his native State, he was called, as almost the immediate successor of the late excellent Dr. Wyman, to the charge of the Asylum for the Insane at Somerville. During the twenty years that Dr. Bell was there, the institution sustained its previously high repute. His serene deportment, his pure life, his sagacity, his unswerving integrity, and his many professional accomplishments, commanded the respect of all connected with the Asylum and of the community at large. His Annual Reports were eagerly sought after, and were remarkable for their clear good sense. Although one or more times, in consequence of ill-health, he resigned, he was persuaded to remain at his post for a certain time longer. It was hard to fill his place. After he left the Asylum, in 1856, he spent his hours in dignified retirement in the bosom of his family, only occasionally emerging therefrom to mingle as leader in political life, or to attend in consultation on cases related to his own specialty. In the Courts of Law of Massachusetts, his opinion on medico-legal questions of insanity was highly prized.

While thus resting from his labors, came "this glorious uprising of a great people," and the North as one man sprung to arms, at the fall of Sumter. Dr. Bell felt that the hour had come for every man

* Appendix A—Memorial.

to do his whole duty. He applied for and immediately received the appointment of Surgeon to the 11th Regiment, Massachusetts Volunteers. Contrary to the wishes of many, and the advice of others, who thought his health too feeble to endure the fatigues of camp life, he promptly obeyed the orders that summoned him to the banks of the Potomac. His talents and worth soon raised him to the rank of Brigade Surgeon. Soon after he left, a letter was sent to him by a friend, expressive of high admiration of the step Dr. Bell had taken, and wishing him a friendly "God speed." Two manly responses were subsequently received from him, from which I have been allowed to quote certain passages, showing some of his views of the present crisis and his self-sacrificing patriotism.

Under date of Sept. 13th, 1861, after alluding to the opposition of friends to his assuming, in his feeble health, the rough duties of the camp, and of the suggestion of others that when his "enthusiasm had collapsed" he "would pine for the quiet of his amply-provided home," he remarks, "I never for a moment gave heed to those who prophesied a disposition to draw back. Because, never experiencing any other enthusiasm beyond a strong impulse of duty, I knew their premises were ill-founded."

Again, after stating the numerous difficulties he had had to contend with, "yet," adds he, "with all these drawbacks I have never had a sick day, or a sad hour, independently of what a father must feel at the thought of four motherless children away from him; nor has the thought ever crossed my

mind of leaving the service until the last blow is struck upon the life of this atrocious rebellion."

On another occasion, alluding to the objections — risk to life, family ties, &c. — urged by some against the entrance of a young man into the army at the present time, he says, " At all events, we have only one life. What better use of it than to give it to the holy cause of our country? Had my eldest son, who died during his first year of college life, been spared, I would cheerfully have consented to his bearing arms in this hour of emergency."

How fitting it seems that such words of loftiest patriotism should have been sealed only a few months afterwards by his own death, while in the service of his then humiliated country, but now on the very verge of triumph!

Dr. Bell was seized with an acute thoracic attack, following what was supposed to be rheumatism. His dyspnœa was intense for a short time; but, as we learn from his attendants, his confidence never forsook him. He knew that his last illness was reached. Though his sufferings at times were great, he conversed freely with the Chaplain upon high religious topics; and, commending himself to God, quietly expired under the ample folds of his dear country's flag. I quote only the language of one who knew whereof he spoke, when I add that, in the death of our beloved friend and learned associate, the officers of the staff, from the highest to the lowest, felt that their " light" had been extinguished. Stronger, more intellectual, perhaps physically braver men there might be; and the loss of each

other one could be readily supplied by an associate equally worthy. But into the magic circle of good and winning qualities possessed by Dr. Bell, and which made him thus the electric light of the staff, none else could enter. Let us all thank God for this bright, this beautiful Ideal, which death has now made of our associate's noble life—sanctified, too, as it was, by a patriot's death.

Our excellent friend and valued Secretary, Dr. J. B. ALLEY,* passed years of the most patient suffering from hereditary phthisis, to the progress of which he ever looked forward, with the most open-eyed cheerfulness, in certain anticipation of his future fate. Unremitting in his quiet but efficient, pious, toil for the good of others, eminently faithful and reliable in the performance of every duty, he was a truly Christian Gentleman, in the broadest signification of that term. I could not find it in my heart to say less of him. I need say no more.

In taking, Gentlemen, a subject for my address on this occasion, I shall follow out the idea quaintly suggested by that admirable man and sweet English writer, George Herbert, when describing what the country parson's sermon should be. "The world," he remarks, "is full of these composures, yet every man's own is fittest, readiest and most savory to him." Some of you have already listened to my previous, imperfect discussions on the topic I shall present, for I have twice before at our annual meetings, at

* Appendix—Memorial.

Springfield in 1855, and again at Boston in 1856, made brief allusions to an investigation I was at that time carrying on, as a Committee of this Society — namely:

ON THE TOPOGRAPHICAL DISTRIBUTION AND LOCAL ORIGIN OF CONSUMPTION IN MASSACHUSETTS.

Since that time, my attention has been constantly directed to this important subject. My convictions have become more and more settled upon the essential truthfulness of the views I, in 1855 and '56, only tremblingly enunciated. I have obtained since then, through private investigations and from various correspondents, not only in Massachusetts, but in New England, still more ample proof. My own daily practice in connection with this terrible scourge, said by Keith Johnston* to be endemic, par excellence, in New England, is perpetually modified by my stern belief in principles then stated imperfectly. I should therefore consider myself really culpable were I to waste your valuable time in any abstruse and polemical questions on therapeutics, or the general practice of medicine, and should neglect to speak on that subject, which, for eight years past, has engrossed so much of my thoughts.

The facts I shall lay before you, and the principles I believe fairly deducible therefrom, involve the

* Geographical Distribution of Health and Disease, by W. Keith Johnston. Edinburgh, 1854.

Dr. Josiah Curtis (Mass. State Registration, 1859, page 71) virtually agrees to this when he says that three die of consumption in New England for every two persons in Great Britain of the same disease.

question of the proof or otherwise of the existence of a Great Primal Law in the Development of Consumption in Massachusetts, and probably New England, and possibly of a still wider scope, *not hitherto distinctly recognized.* Attention to this law by our ancestors, and by ourselves at the present hour, would, as I believe, have saved, and would still be saving, hecatombs of human beings that are now annually sacrificed. Holding most firmly to this opinion, you will readily understand my eager anxiety to convince not only you, my associates and efficient collaborators in this investigation, but, through you, the whole community, of its vital importance to the present and still more to future generations in New England, and possibly other parts of our country.

But in addition to the intrinsic worth of the subject to be discussed, I claim your candid, and, if possible, close attention to the remarks I shall make, for another reason, viz.: The inferences I shall make, and the Law of Consumption Development I shall try to support, are merely the summing up of data furnished to me by yourselves. I stand, therefore, now before you the exponent of your own (unconscious, perhaps, it may be on the part of many of you) medical opinion. For you are all aware that to the courtesy and to that fine *esprit de corps* I have always found in the Massachusetts Medical Society, spread as it is over all the Old Bay State, from beyond the Berkshire Hills to the Atlantic Coast, I owe *all* the chief facts and statements upon which this opinion is founded.

The two following propositions contain the essential points of this address :—

First. A residence on or near a damp soil, whether that dampness be inherent in the soil itself, or caused by percolation from adjacent ponds, rivers, meadows, marshes or springy soils, is one of the primal causes of consumption in Massachusetts, probably in New England, and possibly in other portions of the globe.

Second. Consumption can be checked in its career, and possibly, nay probably, prevented in some instances, by attention to this law.

The essential truths thus enunciated I am ready to defend against all mere assertions of individual opinion, however much those assertions may appear to sustain the reverse of these propositions. I pray you not to judge hastily, but if any remarks I make seem not warranted by the present state of medical knowledge, suspend awhile your judgments, and look not only at *my* facts, but open your own eyes and your intellects to a fair and thorough examination of similar facts, that may be really occurring within the rounds of *your* daily professional life. If you do this, it may happen, as it has happened to myself, and also to one who was, at first, a very decided opponent, an aged and very excellent practitioner in New Hamphsire. We both became convinced, in spite of our own preconceived notions, solely by the evidence of actual phenomena, occurring, as it were, under our very eyes.

I lay down now before you, as among my *Medical Axioms*, the following statements:—

1st. *Consumption is not, as some writers have contended, endemic equally in every part of New England;* but there are some localities where it is very rife, and others where it is vastly less destructive than in the State at large.

2d. *There is a law*, hitherto scarcely noticed, or but vaguely hinted at by one or two individual writers, but (as I believe) *never proved* until now, *which is one of the main causes, if not the sole cause, of this unequal topographical distribution of consumption in New England.*

3d. *This law is intimately connected with, and apparently dependent on, the humidity of the soils, on or near which stand the towns, villages, or even single houses, where consumption prevails.*

4th. *The existence of this law of soil-moisture, as one of the prime causes of consumption in New England*, can be proved, as I think, by several lines of argument, resting on actual facts obtained either from public or private records, statistical data, or the opinions of physicians, practising medicine in various parts of New England.

These lines of proof, or of argument, are drawn from the following sources:—

I. Massachusetts State Registration Reports.

II. Medical Opinion of Massachusetts, as embodied in the returns made to me, as a Committee of this Society — these returns consisting of written

reports from resident physicians of one hundred and eighty-three towns.

III. Actual Statistics of deaths by consumption, received from such correspondents. Some of these statistics are but *incidentally* mentioned, while others are from towns, districted and carefully examined with reference to the relative prevalence of consumption in the different districts. In some of the most important of these, the examination was made without my correspondent or myself being aware of the existence of any law such as that which I shall present at this time.

IV. Peculiarities of certain towns and of villages in the same townships, in some of which consumption is quite prevalent, and in others much less so; these differences being connected most closely with corresponding differences in the amount of moisture of the soil of said places.

V. Certain well-known houses, which, in various towns, are known by the inhabitants and physicians to have been long noted as the abode of consumption, and in some of which several families have been, during the past fifty years, cut off by the disease, without the least suspicion, on the part of the occupants, of the fatal position in which the houses were placed.

VI. Confirmatory facts, statistics and opinions from Rhode Island, Maine and New Hampshire.

VII. The medical statistics given in the Report on the health of the United States Army, strongly supporting the idea of the existence of the same law, and the operation of it over the whole of the United States.

VIII. Results of my own practice since I first became convinced of the truth of the law—said results consisting of *(a)* Statistics from my private medical records; *(b)* Results actually derived from my choice of localities for consumptive patients, based on a belief in the law.

IX. Apparent exceptions to the law.

It will, of course, be impossible to do anything more than briefly allude to each of these various lines of proof; and while doing so, I must ask you to believe in the truthfulness of what I quote from the voluminous manuscript reports and letters, received chiefly from yourselves and from some excellent and zealous physicians in Maine, New Hampshire and Rhode Island.

These reports and these letters should be kept among other valuable manuscripts of the Society. They embody not only the present medical opinion about consumption and its causes, in Massachusetts, but much incidental matter of importance to Public Hygiene. I hope, at some future time, the Society will have portions of them published.

I. State Registration Reports.

The following table is mainly founded on statistics of four years, or between 1849 and 1852, inclusive. The last column, containing the proportion of deaths by consumption to the population, includes five years, viz., 1849–'53 inclusive.*

* State Registration, Report 11th, pages 70–136, and Report 12th, p. 162.

TABLE I.

*Showing Consumption slightly more prevalent in the Atlantic than in the Inland Counties.**

INLAND COUNTIES.	Deaths by Consumption, 1849 to 1852.	Deaths by all Diseases, 1849 to 1852.	Per centages of Deaths by Consumption to all Deaths.	One Person dies by Consumption in every †	ATLANTIC COUNTIES.	Deaths by Consumption, 1849 to 1852.	Deaths by all Diseases, 1849 to 1852.	Per centages of Deaths by Consumption to all Deaths.	One Person dies by Consumption in every †
Berkshire.....	591	2783	21.27	67 per.	Barnstable...	473	1869	25.30	60 per.
Franklin.....	419	1733	24.17	56 "	Bristol.....	1172	4920	23.82	50 "
Hampden.....	720	3529	20.40	55 "	Dukes.....	214	738	28.99	50 "
Hampshire....	520	2355	22.08	53 "	Nantucket..				
Middlesex.....	2292	10802	21.21	53 "	Plymouth...	894	3223	27.73	47 "
Norfolk.....	1046	5168	20.22	58 "	Essex.....	2153	9369	22.97	48 "
Worcester.....	2080	9287	22.39	48 "	Suffolk.....	2696	16934	15.91	42 "

* 22.44 of all deaths in Massachusetts are caused by consumption. Vide Reg. Rep. 1853; also 1859, p. 71. † Data for 5 years, 1849 to 1853. (See Appendix.)

Middlesex and Norfolk Counties are placed among the inland counties, while they do, in reality, touch the Atlantic coast. Strictly speaking, Middlesex does not touch the *coast*, though one small point projects down *near* it. In Norfolk, I have considered that the vast proportion of all the inhabitants of the county are subjected to inland influences. All the table is intended to prove, is, that apparently even the imperfect State Registration indicates that consumption is not equally prevalent in all parts of the Commonwealth; and second, that probably it prevails a little more on the coast, or where coast influences are exerted on the inhabitants, than it does where the inland influences prevail.

Again, it will be remarked that Berkshire, the most western county, about 200 miles from the Atlantic, hilly, with warm valleys, seems less afflicted than any in the State.

Worcester shows apparently the influence of its large central city — "the heart of the Commonwealth" — in the frequency of consumption.

Similar remarks may be made of Suffolk, of which Boston is almost the sole influencing power. Barnstable, on the contrary, on the coast, and doubly exposed to coast influences, has two advantages over its companions. It is a long, comparatively narrow peninsula, and composed almost entirely of a sandy porous soil. Of the advantage derived from these two circumstances, we shall have hereafter opportunities of being convinced, as we proceed in our investigations.

II.—Medical Opinion on the Prevalence of Consumption in Massachusetts.

This opinion is based upon answers made by resident Physicians of one hundred and eighty-three, out of the three hundred and twenty-five townships in Massachusetts. The answers were replies to the two following questions:—

1st, Is any portion of your town peculiarly liable to the prevalence of consumption?

2d, If so, what, if any, are the peculiarities of the spot?

These questions were introduced into a list I had previously prepared of fifteen other questions—the answers to which would enable a reader to judge of the hygienic condition of the township, or localities in it, and obtain some idea of the social and industrial state of the inhabitants.*

* For questions and names of Correspondents, see App. B.

I had hoped to compare these returns with the State Registration Reports of Deaths and Diseases. This was impossible, owing to the imperfect returns made by State officials. I introduced the two questions, above given, rather unwillingly, because I had no belief that any good would result, feeling confident, as I suppose the majority of you are, that consumption prevails equally over every portion of New England. I yielded, however, to the suggestion, because of the sagacity of him who made it.

By dint of repeated circulars, during a period of nearly three years, I obtained returns from all the towns of the Commonwealth. Of the one hundred and eighty-three physicians, I have no reason to believe that a single one held the opinion that I must enunciate, or fail to express what really their data compel me to say. I mention this, in order that you may understand, still more distinctly, how little I, and I think others who now agree with me, have been guided by preconceived notions on the subject. Still further, two of my correspondents evidently recognized the existence of *some unknown* law of development of consumption. They had, in fact, by their own careful investigations, elaborated the influence of the very law, I shall bring forward, and one wrote to me upon the existence of some unknown law; but he could not generalize enough from the imperfect data of one town, even to get a glimpse of what soon became clear to me, who was able to collate returns from all quarters of the State.

Before giving the *resumé* of these returns, and from which I infer the "*Medical Opinion*" of the State, let

me meet an objection urged, at first, by some of the ablest of the profession, and by others, against the value of "medical opinion." "In these days of skepticism, who believes in anything dependent on mere medical opinion?" Such was really the objection instantly raised by one, who formerly was an able opponent. I recognize and acknowledge, to a certain degree, at least, the justice of the palpable sneer against the slight grounds on which medical opinion is but too often based. But I totally deny its applicability to the present case, and for the following reason. In the answers to the two questions above named, there is not involved the consideration of any abstruse question in medicine, but simply the statement of the existence or non-existence of facts, viz., the more frequent occurrence or non-occurrence of consumption in certain localities, and a specification of the peculiarities, if any, of these localities. For aught I can see, we may believe a physician's report of such facts, as much as we would believe the statement made by any intelligent witness of a certain fact. I not only claim this, but I assert that we ought to take the statements made by physicians, educated men, as those made by a class of persons, far above the average of witnesses on any subject. Now this Medical Opinion, which I shall present to you, is simply my inference from statements made to me by physicians, who have had no concert with one another, and must have been without the least suspicion of what I may have thought, or may have been supposed to wish them to say upon the subject. These facts have occurred in their own

townships, while engaged in their daily routines of medical practice. I have simply laid out before me their returns, and from such data have elaborated the following classification of the towns of the Commonwealth. Logically, I think I can claim any inference, that can be justly drawn therefrom, as the *real* medical opinion of the State, even if each and every one of my correspondents, looking at the subject from his own stand-point, may, at first sight, be disposed to deny that he admits the truth of such inference.

All the answers to the circulars, have come from physicians, except in three instances, where there were no physicians in the towns; and in these cases, intelligent citizens have replied.

Two hundred and twelve have answered more or less elaborately, the two questions above stated, viz., by one hundred and eighty-three were given medical opinions, and, at times, statistics *incidentally;* by ten, valuable statistical data were procured for the special elucidation of the subject; by nineteen, either doubtful or opposing statements to the views, entertained in this address, were given; by twenty-one, miscellaneous statements were made on the hygienic condition of the towns, but not bearing at all upon the topics herein discussed.

Finally, from the remainder, a little more than one third of the towns in the State, I have had simply monosyllabic, negative, answers to the two special questions, and equally monosyllabic, but definite, returns to all other questions. These returns cannot, of course, be used in this discussion, save so far

as this, viz., that a certain number of physicians of the Commonwealth have not observed any peculiarities in the prevalence of consumption, in different portions of their towns. The fact, however, that a phenomenon, not very palpable even to the most acute observer, is not seen by every one, is no proof of the non-existence of that phenomenon, especially when it is in agreement with the elaborate, well-gathered statistical data of a certain number.

The one hundred and eighty-three townships abovenamed may be classified as follows:—

First, Townships in which, according to the opinion of resident Physicians, consumption is *quite rife.* (Colored *red* on map*)	28
Second, Those in which resident Physicians find *certain localities* unusually subject to consumption, and more so than are the towns generally. (Colored with *red line* around township)	54
Third, Those combining both of these qualities, viz., townships in which the disease is *quite common* in every part, and still more so in certain localities. (Colored with *a red cross*)	21
Fourth, Those in which it is more rarely seen in the town as a whole, but in which are found certain localities *peculiarly afflicted* by it. (Colored *blue,* with *red lines around*)	23
Fifth, Those in which consumption is rare. (Colored *blue*)	57
Total,	183

In order to give at a glance the whole results, I submit the following table, compiled from these returns.

---

* See Map.

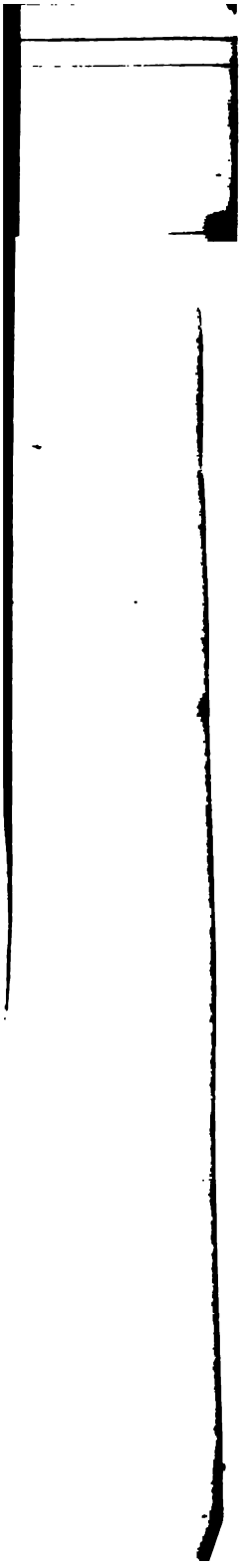


TABLE II.

Showing the opinions of Resident Physicians in 183 *Towns on the Prevalence of Consumption in the Townships or parts of them, and a comparison of this Prevalence with the amount of Moisture and Dryness of the Townships or Localities.*

No. of Towns from which data are obtained.	Consumption prevails.	Dryness a prominent characteristic (i. e. "towns are exposed," "dry, mountainous," "sheltered," "dry," "island," "peninsula.")*	Per centages. Dry or Insular.	Moisture a prominent characteristic (i.e. "exposed moist," "on the shore," "near river," "pond," "meadow," "springy soil," "foggy.")	Per centages. Moist.	Other Influences.					
						Bad Habits.	Factory.	Hereditary.	Bleak Exposure.	Valley, Medium.	Doubtful.
28	Generally.	In 6 Towns.	21.42	In 20 Towns.	71.42						2
54	In certain localities	In none.	.....	In 50 localities.	92.59	2	1		1		
21	Generally and in certain localities.	In 6.	28.57	In 14 Towns.	66.66						1
		In none.	.....	In 16 localities.	76.19		1		2		2
23	Rarely, but much in certain localities.	In 13.	56.52	In 6 Towns.	26.08				2	1	1
		In none.	.....	In 13 localities.	56.52		5	1		2	2
57	Rarely.	In 37.	64.91	In 9 Towns.	15.78						11
183		62	Average, 24.48 are dry.	128	Av. 57.87 are moist.						

* For reasons why "islands and peninsulas" are here included, see remarks in this Address on the subject of "Places of residence favorable for Consumptives."

This table may be thus read:—Of those townships where consumption is, in the opinion of resident physicians, *rife*, nearly three quarters (71.42 per ct.) are *damp;* whereas in other townships, where the disease is on the same authority said to be of rare occurrence, *dryness* is the characteristic, in nearly the same proportion (viz., 64.91 per ct.). This becomes still more manifest, if we examine the other data in the table. For example, we find 92.59 per cent. of all those parts of 54 townships which are, for some heretofore, unknown reason, more subject than others to the prevalence of consumption, are moist, and *not one is described as dry!*

Again, of the 21 townships said to have rather more of the disease than other towns have of it, 66.66 per cent. of them are moist. These townships have localities, in which consumption prevails inordinately. Now, in these localities, the per centages in regard to moisture are vastly augmented, 76.19 of them being moist, and *none being described as dry.*

Finally, of 23 townships, in which consumption is thought to be *rarely* prevalent, we find 56.52 per cent. are dry; 26.08 moist; but in these same townships there are localities, peculiarly subject to the disease, and here we find the result similar to that given above, viz., 56.52 of these localities are moist, and *none are dry.*

We thus see, first, that, in the five classes of townships reported upon, dampness of the soil seems to prevail as the prominent characteristic of the *townships*, in which consumption prevails; and second, this becomes much more evident in the smaller lo-

calities and parts of towns where consumption is rife, in *not a single one of which is dryness noticed!* but, on the contrary, very large per centages (92, 76, and 56) are wet. I think you must agree with me that the following proposition seems fairly deducible from the statements given:—

Medical opinion in Massachusetts, as deduced from the written statements of resident physicians in 183 *towns, tends strongly to prove, though perhaps not affording perfect proof of, the existence of a law in the development of consumption in Massachusetts, which law has for its central idea, that dampness of the soil of any township or locality is intimately connected, and probably as cause and effect, with the prevalence of consumption in that township or locality.*

III.—Actual Statistics of deaths by Consumption received from my Correspondents.

This species of proof is, of course, the most valuable, but, at the same time, very difficult to procure. For several years, I have endeavored to persuade some of my correspondents to classify different districts of their several towns, according to the characteristics of the soil or amount of water in these portions, and also to procure the exact number of deaths by consumption and by all diseases, in the same districts, and, if possible, the number of inhabitants of each. To obtain such data, one must have not only very obliging correspondents, but likewise persons of some leisure, and, still more, men imbued with a real

love for scientific investigations into the mysteries of medical topography and vital statistics. A few such it has been my good fortune to have had. And although their statistics are few, they are of such a nature as not only to support the results obtained from medical opinion, but seemed to give more definiteness of outline, to what may perhaps be a law of dampness of the soil, as a cause of consumption, already foreshadowed by medical opinion.

The statistics are of two kinds:—

1st, Those incidentally and cursorily given by correspondents in connection with their general accounts of the hygienic condition of various towns.

2d, Statistics of deaths by consumption and by all diseases, or population, procured from the various districts in the townships. This second series is vastly the more valuable one of the two; and it is evident that any such data, if procured from a perfectly unbiassed source, and if confirmatory of medical opinion and of less elaborate statistics, become of great value, although they may be few in number.

I present the following Table (III.), as showing the first kind of statistics. It may be called the *Table of Incidental Statistics*, to distinguish it from that which I would call *Table of Elaborate Statistics*, to be given subsequently.

We may read this table as follows:—Column first says that in two thirds (8-12) of the twelve towns in which consumption prevails generally, moisture of the places is a prominent feature; while *only one sixth* (2-12) *are dry*. Column second indicates that of nine particular localities where consumption pre-

vails, eight ninths (8-9) are moist or are near moist places, one has a variable state, and *none are dry.*

TABLE III.

Made by comparing the Statistics of Deaths by Consumption, as given incidentally *by my Correspondents in various Towns and localities in Massachusetts, with the hygienic condition (chiefly in regard to the amount of moisture of the soil) of said Townships and Localities, as given by the same Correspondents.*

Characteristics of the Town or Locality.	Consumption prevails in Town or Locality						
	Generally.	Locally.	Generally and Locally.		Rarely.	Rarely in Town, but much locally.	
			Gen.	*Loc.*		*Gen.*	*Loc.*
Dryness.....	2 towns.	....	2 towns.	....	12 towns.	6 towns.	....
Moisture	8 "	6 towns.	10 "	11 towns	1 "	1 "	4 towns.
Moisture near	....	2 "	....	....	....	....	1 "
Sheltered, warm ..	....	....	....	....	1 "	....	....
Diluvial, Sand near	....	....	....	....	1 "	....	....
Low.....	....	....	....	....	....	....	1 "
Variable Climate..	....	1 "	2 "	....	1 "	....	....
Promontory	....	....	...	....	2 "	....	....
Exp. to N. Winds.	....	....	....	....	...	....	1 "
do. not changeable	....	....	....	....	....	1 "	....
High	....	....	....	....	....	1 "	....
Medium	....	....	....	....	1 "	....	....
Doubtful	2 "	....	....	1 "	....	....	....
Totals.	12	9	14	12	19	9	7

Columns third and fourth show that of fourteen townships where consumption prevails generally, and also locally, in an especial manner, five sevenths (5-7) of the townships are moist, one seventh (1-7) variable, one seventh (1-7) is dry; while of the consumption-bearing localities, eleven twelfths (11-12) are damp, and one twelfth (1-12) is doubtful — *not one is dry.*

Column fifth declares that of nineteen towns, that

have less consumption than others, twelve (12-19) *are dry*, only one (1-19) is moist. The others have influences, either insular, or medium, or tending to dryness. In other words, where consumption is less prevalent, there less moisture is found in townships or localities.

Columns sixth and seventh illustrate in one town the results produced in columns five and two; two thirds of the townships where consumption is rare, being *dry*, while localities in the same townships, known to have an undue amount of consumption, are more than half of them moist, or "near moist," "low," or "exposed" places.

I am permitted therefore, I think, to assert, that:

Statistics gathered incidentally from my Correspondents sustain, as far as they sustain any opinion, on the question before us, the views we have drawn from Medical Opinion.

But I shall now present statistical evidence, which not only sustains the results of medical opinion and incidental statistics, but seems to *present strong presumptive evidence* that there is a certain, almost fixed ratio in the prevalence of consumption, according to the amount of dampness in the particular location.

In order to present this part of my subject more clearly, I have prepared the following table from data obtained at my special request. In it are found, I think, accurate mortuary statistics. Though few in number, a careful survey of their bearings upon the question seems to sustain all preceding

statements, and suggests further and more exact ideas of the influence of the law. The following inferences are fairly deducible from the table (IV.):

1st. Six (Acton, Cohasset, Townsend, Granby, Northboro', West Newbury) out of eight towns, carefully districted with reference to locality, afford mortuary statistics each sustaining, more or less fully, all my previous assertions and inferences. One (Boston) affords doubtful results, the statistics of the native population being in accordance with previous results, while the Irish seem to have had a greater proportion of deaths on the hill than in the lower, and apparently, more damp locality. Both of these localities, however, are equal in filth and in all the concomitants of an over-crowded Irish population. Finally, one (Royalston) is reported to have had over five per cent. more of deaths from consumption in the dry than in the wet localities. I do not pretend to account for this, but would simply draw attention to the fact of the enormous per centages of consumption, compared to total deaths in both parts of the town (32.51 and 38.22), indicating certainly a very peculiar township. I know nothing of its peculiarities, and I cannot suggest any explanation of the apparent anomaly. With these exceptions, we may say that from four to fifty per cent. more of consumption deaths are found in the wet than in the dry localities of the townships.

2d. Some of the towns present, in their data, a *more or less regular gradation in the prevalence of consumption, according to the amount of moisture in or near the various localities.*

TABLE IV.

Names of Towns.	Data on which the Table rests.	Number of Deaths by Consumption.														
		In Dry Localities.			Localities of Medium Moist.			Clayey Subsoil.			Localities near Dampness.			Low, damp Localities.		
		All Deaths.	Consump.	Per cent. to total deaths.	All Deaths.	Consump.	Per cent. to total deaths.	All Deaths.	Consump.	Per cent. to total deaths.	All Deaths.	Consump.	Per cent. to total deaths.	All Deaths.	Consump.	Per cent. to total deaths.
Acton	305 deaths. 45 by consumption, fr. 1846 to 1856, inclusive.	180												125		
		....	9	5.00	....		.....	....		.....	....		.....	....	33	26.40
Cohasset	433 deaths, 81 by consumption, fr. 1844 to 1857.	59			102						192					
		....	9	15.25	....	19	18.62	....		.....	....	53	27.60	....		.....
Boston (1 yr.)*, 1856.....	Amr. 87 deaths. 21 Consum.	53												34		
			11	20.75											10	29.41
	Irish. 202 deaths. 45 Cons.	44												158		
		....	11	25.00	....		.....	....		.....	....		.....	....	34	21.51
Royalston	Pop. 1469.† 198 deaths, 68 by Con. fr. 1851 to '59 inclusive.	34												163		
			13	38.23											53	32.51

NORTHBORO'.....	Pop. 1568. 13 yrs.	One dies by Consumption in every 74.5 persons.	One dies by Consumption in every 29.7 persons.	....	.....	....	.....	One dies by Consumption in every 23.69 persons.
W. NEWBURY ‡	Pop. 1746. 213 deaths, 43 by Con. fr. May 1, '44 to Ap. 30, '54. 10 yrs.	One dies by Consumption in every 76.55 inhabitants.	One dies by Consumption in every 52.06 inhabitants.					One dies by Consumption in every 24.95 inhabitants.
		Per cent. to estimated Pop.	*Per cent. to estimated Pop.*	*Per cent. to estimated Pop.*	*Per cent to estimated Pop.*			
TOWNSEND §.....	43 by consumption, fr. 1848 to 1853, inclusive.	16.36	19.11	25.85	30.85			

* These statistics were procured from the City Registrar. They are from four districts in the City, viz.: two elevated, Beacon and Fort Hills, and two lower and damper districts, Harrison Avenue and South Cove. Beacon Hill and Harrison Avenue districts are occupied by Americans; the other two by Irish.

† In "dry locality," Royalston, population 350; in "low, damp" locality, 1100.

‡ The returns from West Newbury become more distinct and peculiarly instructive as to the (apparent, at least) influence of moisture, as productive of Consumption, if we classify the districts into northern and southern, or those "adjacent to the river," with "clayey subsoil" drying slowly in the spring, and those separated from the river by a range of hills, and having much less clayey subsoil, being thereby warmer and drier. Thus:—

In districts No. 1, 2, 3 (Map), northern or river districts, one dies by consumption in every 36.31.
In districts No. 4, 5, 6 (Map), southern, and drier, warmer, one dies by consumption in every 59.37.

§ These statistics of Townsend show the relative proportion of deaths in the different districts, according to the population in each, as deduced from the absolute number of scholars in each district. To those unacquainted with Massachusetts, and consequently unaware of the almost universal education of children in the country towns of the State, this method of arriving at the relative population may seem very indefinite. I certainly should have preferred more exact returns; but it is evident my correspondent could not, without taking a census of each district, have obtained any returns more accurate than this approximation to the exact truth, obtained from the records of the district schools.

TABLE IV.—*(Continued).* GRANBY, *May* 1, 1843, *to Dec.* 1, 1855.

RETURNS.	Population.	DEATHS.		Per cent. of Deaths by Consumpt'n to total Deaths.	Per cent. of Deaths by Consumpt'n to Pop.
		All Deaths.	Consumption		
Physician's Returns.					
Moist Districts.....	375	....	29	....	7.73
Remainder of Town....	625	....	12	....	1 92
Town Clerk's Returns.					
Moist Districts.....	....	81	36*	44.44	....
Remainder of Town....	....	102	17	16.66	....

* The discrepancy between the returns of Physician and Town Clerk, is owing to the Clerk having probably recorded some cases as consumption, which merely *appeared* to be such.

In one of them (Townsend), this fact is most extraordinarily well marked. Before receiving these data, I had become convinced that dampness of the soil did have an important influence on the prevalence of consumption, over large tracts of country. But these returns from Townsend indicated that there was, perhaps, a law of consumptive development, that would show itself within much narrower limits. It definitely foreshadowed differences in the deaths by consumption, in spots of the same townships, *very near—almost contiguous to each other*, but which presented very different geological characteristics. Such being the fact, and these data having had such an important influence over my own mind, in its views of this whole subject, I may perhaps be pardoned for alluding still more particularly to them. My correspondent entered, most heartily, into my desire for getting statistics from the different townships and parts of townships. He accordingly obtained lists of all the deaths by consumption, and calculat-

ed the relative population by the number of scholars in thirteen distinctly different districts in Townsend, where he then resided. These data were thrown together in one mass, those of the wet, medium and dry districts being promiscuously mingled. The materials were, in fact, chaotic in their unarranged details. I looked in vain, for some time, for any thread to guide me through the labyrinth of facts. Finally, I threw the letter aside, fearing that though there were facts enough, I should make little of them. As I have hinted above, at the time of receiving them, I had no idea of the existence of any law, in any degree, regulating the production of consumption, within *very limited districts*. With entire scepticism as to the result, I finally, months subsequently to my first reception of them, again took up these data, intending to classify, if possible, the thirteen districts according to the relative amounts of moisture in the soil in each. In order to prevent entirely any bias being given to my mind from vague notions I had already gained of the influence of this law of soil moisture in the State at large, I covered from sight the mortuary statistics, while I was classifying the districts. They could be arranged as follows, viz:—1, dry; 2, "hills, with clayey subsoil, retaining moisture;" 3, "near damp spots;" 4, "in wet and low places." Now, gentlemen, I can assure you that, when on examination of the record of deaths, I *found such an exact relation to exist* in all the four classes of districts *between the amount of soil-dampness and the number of deaths by consumption*, I was beyond measure surprised. I seemed on the

point of finding out one of the, hitherto unnoticed, laws of development of this dire scourge of our race, and by attention to which, we might hope for some future alleviation of it. For *did not these facts, as far as one imperfeet series of facts could do so, seem to indicate that consumption varies immensely with the character of the soil, even within very narrow limits?*

When I revolved in my mind the possibility of this being an exact representation of a great truth, and then thought of the vast influence the thorough knowledge of it must have upon our professional practice, and of the beneficial effects upon Public Hygiene that would perhaps result, *in future*, from an intelligent obedience to it by the community at large, it was the happiest and most satisfactory moment of my professional life. I remembered that over twenty thousand* consumptive patients had died in Massachusetts during the previous five years. I asked myself these questions:—Supposing this township represents the various townships of the State, and that they all have their varieties of soil, then if this township's statistics are true, and at least twice as many die in the wet as in the dry districts, may not similar results have occurred and perhaps be still occurring all over the State in which these twenty thousand human beings have been slain? Having arrived at this point, you will not be surprised at my asking, still further, this pregnant question:— If our fathers and we had paid greater attention to

* In Registration Report, 1857, we find that during the five years, including 1853 to '57, 23,280 died of consumption in Massachusetts.

this law, and we had always resided in dry localities, leaving the lower and moister for the purposes of business, perhaps, during the day, or for agriculture, should we not be saving over one thousand lives annually in Massachusetts, which are now foolishly sacrificed? These questions I then answered but imperfectly, but statistics since received, and of which I shall hereafter give you, I hope, more convincing examples, have only made me, each year, more firm in the conviction of the affirmative of these questions, at least in all their essential elements.

I pass, however, now to my fourth line of evidence.

IV.—PECULIARITIES OF CERTAIN VILLAGES IN CERTAIN TOWNSHIPS, IN ONE OF WHICH CONSUMPTION IS QUITE PREVALENT, AND IN ANOTHER MUCH LESS SO, THESE APPEARANCES BEING CONNECTED MOST CLOSELY WITH CORRESPONDING DIFFERENCES IN THE AMOUNT OF MOISTURE OF THE SOIL AND EXPOSURE OF SAID VILLAGES.

I have only two townships of which the resident physicians have given me statistics, each of two villages within their own immediate circle of practice, and concerning which they are thoroughly acquainted. These townships are Marlboro' and West Boylston.

The former, twenty-five miles west of Boston, is one of the best agricultural towns in the State. Dr. E. T. Barnes thus describes two villages: Both are situated higher than the adjacent towns; both have a strong loamy soil, rocky, full of springs, and both seem equal in this respect. The more westerly one

is one hundred and fifty to two hundred and fifty feet higher than the other. It runs north and south upon a ridge of hills, which ridge is the first obstacle the gusts and blasts from Wachusett and Monadnock Mountains meet with, in their career from north-west to south-east. They rush over this village with the greatest violence and velocity. The east village, running east and west, is sheltered on the west, north and east by considerable hills, and is comparatively exempt from these inconveniences. The snow remains much longer in the former than in the latter. The town contains more than 4200 inhabitants, and Dr. Barnes can remember all who have died of phthisis during the last ten years. He says forty, or perhaps one or two more, are all who have died of consumption in the township, during that period. Of these, eighteen were residents in the more exposed village; three or four resided in the least exposed village. This statement, of course, simply asserts, that of two equally damp villages, that which has the bleaker exposure has suffered more from consumption than the other that is less exposed. It is, therefore, another argument that consumption is not equally prevalent in every part of the State; but proves nothing in regard to dampness alone. While claiming dampness of the soil as *one of the prime causes of consumption in New England, I do not assert that it is the sole cause, or that the combination of changeableness and coldness with moisture, may not be vastly more fatal than moisture alone.*

The statistics of the second town, viz., West Boylston, is definitely in favor of dampness as a cause

of consumption, while at the same time they suggest the importance of defence from the northern and eastern blasts.

Dr. Lovell, the resident physician, gave me such a deeply interesting account of the differences between the two villages, in their relative amount of pulmonary disease, that I was induced to visit them.

I found them as follows: In the village where consumption prevails, the houses are situated nearly on the immediate level of a mill-pond, and at the junction of two rivers. Water seems permeating every where, and not a cellar, as it seemed to me, can escape its influence. To increase the coldness of the spot, the north and north-east winds have full access to it through the river valley. Although the day was fair and not at all cold, I felt chilly as I drove through it. Dr. Lovell assures me that the nights in this village are cool and damp, seldom without a fog. The other village, a mile or more distant, is situated on a ridge of land, fifty or sixty feet above a small artificial pond, surrounded chiefly by a sandy beach. North of the village, but at a certain distance from it, arises a high ridge of sandy hills, covered with woods. The whole position is evidently one entirely different from that of the other village, being essentially dry, warm, open to the genial southern sun, and defended from northern and eastern blasts. Dr. Lovell says: "The air here is generally warm and dry, so that the inhabitants sleep with their windows open from early spring to late in the autumn." Dr. Lovell gave me statistics for 15 years, and the estimated relative

population of the two villages, viz., 500 in the moister and colder, and 200 in the drier and warmer. In the former he had had 12 cases of consumption, in the latter only 1. He had likewise noticed a much greater prevalence of other diseases, connected with the air-passages, as croup and bronchitis, pneumonia, &c. in the damper village. At the time of my visit, I observed with painful anticipations, that low down on the very edge of the pond, at the base of the bluff on which the drier village stands, and over almost the only land, that presented a wet, meadowy aspect, the proprietor of the factory was erecting a new building, for the purpose of using it as a residence for his workmen, nearer to their place of work than the houses, on the ridge above. I even then feared the result, and I beg you to mark the fact that has since occurred, I will not say, in consequence, but certainly in connection with this change of location of the residences of the people, viz.: Dr. Lovell remarked to me within the past year, that, since his first report to me in 1855 and '56, consumption had appeared to be more prevalent in that village.

V. — CERTAIN HOUSES, WHICH, IN VARIOUS TOWNS, HAVE BEEN LONG KNOWN, BY THE INHABITANTS AND BY RESIDENT PHYSICIANS, AS THE ABODES OF CONSUMPTIVE PATIENTS, AND IN SOME OF WHICH, SEVERAL FAMILIES HAVE BEEN, DURING THE PAST FIFTY YEARS, CUT OFF BY CONSUMPTION.

The evidence I shall present upon this point and during the remainder of these remarks, I have

never placed before you at any previous period, they having been all procured since my report in 1856. They are among the most remarkable I have obtained. By them I think I shall lead you very strongly to suspect, even if I do not wholly convince you, that this all-powerful law of soil-moisture exerts its baleful influences within still narrower compass, than any previously hinted at, and that *even some houses may become the foci of consumption, when others but slightly removed from them, but on a drier soil, almost wholly escape.*

I am myself acquainted with two houses within twelve miles of Boston, in which I have no doubt this influence is working. I almost daily saw one while erecting by a speculator, at the very mouth of a low valley, running directly into Charles River, and but a foot or two above the level of the water. On each side of this valley arise high and sandy hills. With each evening sunset, a flood of cold moisture, almost if not quite imperceptible to eyesight, but quite palpable to the sensitive skin of the traveller, settles in between the hills and gradually envelops this devoted house. I have often passed the spot late at night. At times the moon shone clearly on the immediately adjacent ridges, but as I descended from them and passed the house, the rays were obscured, and a chilly feeling came over me, as if taking a cold bath. On these occasions I thought that if there were any truth in this apparent law of soil-moisture, I should hear of its effects on the family residing there. During the first year of their residence, the father suffered with a low and chronic

cachexia. About two years afterwards, the wife consulted me for a cough, that had been coming on insidiously for several months. She was not of a consumptive family. I was not surprised, though certainly shocked, at finding, in addition to rational signs, undoubted crepitus under the left clavicle. I prescribed the usual remedies for early phthisis, but I felt bound then, and have no reason to doubt that the advice was strictly correct, to say that the *first* thing to be done, if safety was to be gained for the patient, was her immediate and permanent change of location to some dry, neighboring hill, or still better, to some place, more thoroughly removed from any dampness. My advice came too late.

I beg you to understand that I do not present this by itself as any proof that dampness of location produces consumption. In this case it may be, and doubtless many of you think it is, a mere coincidence. I have no right, perhaps, to object to that view. *I have, however, had too many of such coincidences.* They, as it were, simply compose the *complement* of the general evidence to the existence of the law. I therefore regard this one case as more significant than most of you perhaps will, at present, allow.

Let us proceed. I know another homestead in which resides a family of wealth and refinement. It is a sweet rural cottage, overhung with clustering vines, delightfully situated amid shade trees, thickly hemmed in "by a shrubberry that Shenstone might have envied." It rests on the borders of a sylvan lake, on a rich, loamy, fertile, moist soil, a few feet only from the water, and scarcely more than a few

inches above its level. In the heats of our midsummer, every passer-by would point out the spot, as one to be selected for its perfect coolness of situation and quiet loveliness. But I fear it is most unhealthy, and for the following reason. The parents occupying it, are themselves healthy, and have had ten children. None have been perfectly robust. Three have already died of consumption. A fourth has it now, in its last stages. The young daughters who remain are, during the day time, some miles away at school, in a high and dry location. They sleep at home. They do not seem so strong as others, and in the eyes of neighbors seem threatened with the disease of which the others died. One son, who is constantly at sea, is healthy.

A previous occupant of this house died of consumption. His family was liable to frequent coughs, while resident there, from which they have escaped since their removal.

All this has happened, and yet I cannot persuade the parents that the pleasant house, in its present location, is the charnel-house of their race, as I verily believe it to be.

Again, pass with me into the interior of the State, and visit another town, very undulating, chiefly agricultural, with one small village, through which runs a stream, between abrupt hills. This place I visited the past summer, in order to see three or four houses, that had been brought to my notice by Dr. Lyman Bartlett, of New Bedford, as proving the truth of the views I have endeavored to bring before you. It was his native place, and he knew whereof

he spoke. No less than three houses he alluded to, as having been nests of consumption. One has only to see them to perceive how entirely their position supports our general views. Two of them are in a low, narrow valley, hidden from the sun by lofty and luxuriantly growing shade trees. The soil, on which they rest, is bursting with moisture, and close by, that is, within a few feet of each, is a mill-stream or pond, the waters from which keep the foundations of the houses perpetually bathed with moisture. Of these I shall forbear here to speak,* but will enter more into detail about a third — the story of which may be told by the following summary:

1. Four grandparents lived to a healthy old age, and died over eighty years old. One of the grandmothers always bore on her neck, scars, said to be from scrofulous ulcers in early life.

2. Two brothers, A and B, married two sisters, both couples being children of these grandparents. All parties were in perfect health at the time of marriage, and with no thought of consumption ever entering their families.

3. After his marriage, A staid in the old homestead, situated on a southern slope, a dry and warm, well-drained spot, where he was born, and there all his children were born and reared to adult life.

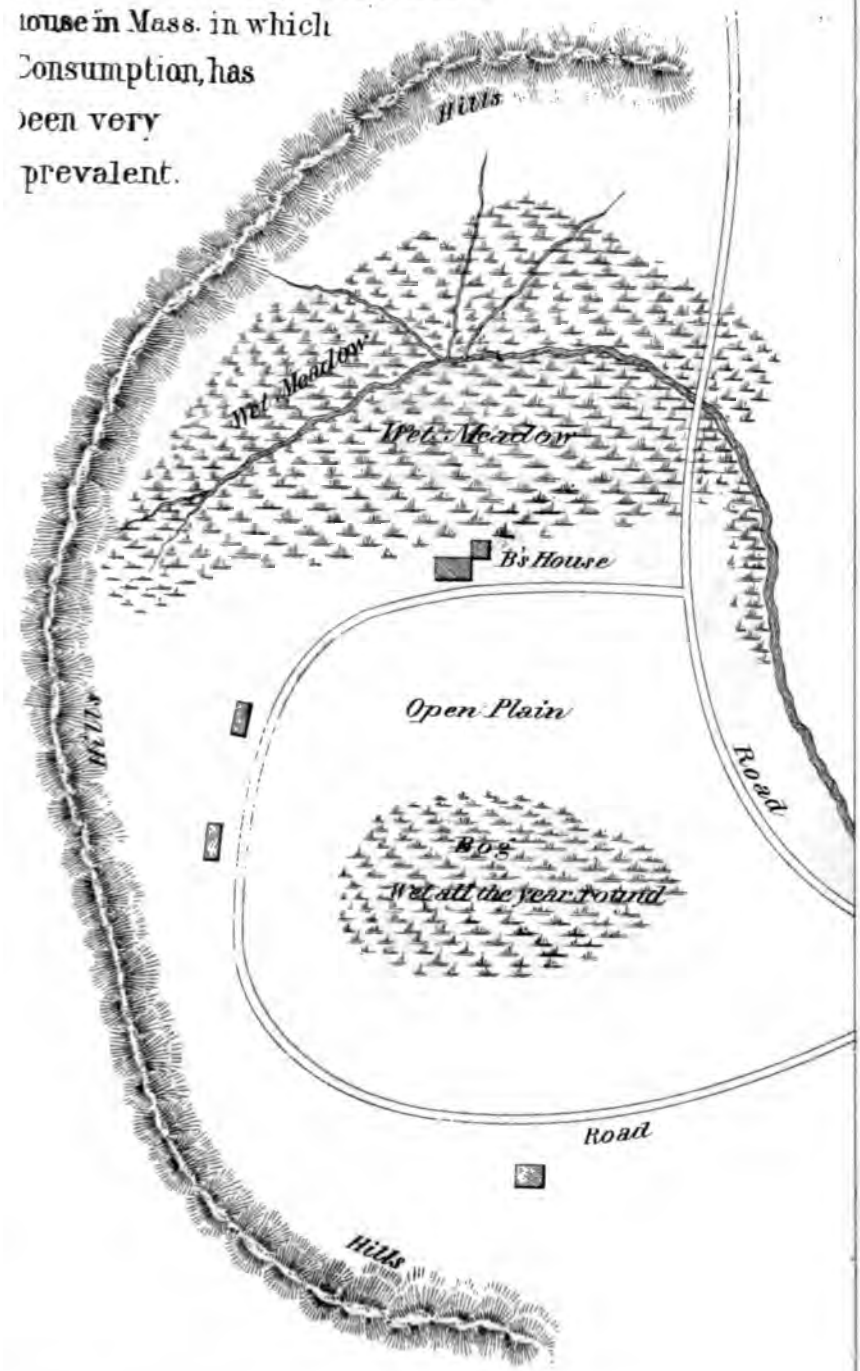
B, on the contrary, moved to a house subjected to wholly different influences, and there his children were born and reared to adult life.†

---

* See Appendix D, for the details.

† The diagram annexed presents the place more distinctly than any mere description. In a few words, it may be said to be situated in a wholly

DIAGRAM showing position of a house in Mass. in which Consumption, has been very prevalent.



The subsequent results in the two families are clearly shown in the subjoined table:

No. Persons in Families A & B.		Now Alive.		Died.						Total Deaths in Family.
Parents.	Children.	In good health.	Consumptive Cough.	Consumption.	Scrofulous Swellings.	Acute Brain Disease.	Acute Bowel Disease.	Diabetes.	Croup.	
A, 2	9	6	....	....	1 quite yg.	1 æt. 25	1	....	....	3
B, 2	11	3*	1	6 child.	....	....	....	1	1	9
....	....	....	....	Mother, æt. 63.	....	....	....	....	....	....

* Father and two sons; the sons having been away from home many years.

The statement of the two families may be made briefly as follows:—Both families, as we have seen, had by one grandmother slight tendencies to scrofula, although consumption proper had never entered into the known tendencies of any ancestor. This was, in fact, a strong belief in the minds of both families.

Of thirteen persons (parents and children), in family B, nine have died; seven (more than two thirds of them), *by consumption;* one of croup, and one of diabetes. Of the surviving four (father and three children), one has been for years slowly *suffering* from apparently *pulmonary disease.* The three others, namely, father and two sons, are healthy; but these two sons have not lived in the homestead for many years. On the contrary, of the eleven persons (parents and children) in family A, three have died

---

different spot. Low, with hills closely surrounding it; a wet meadow comes up directly to the cellar wall; a bog, wet all the year, is in front; a river is hard by. Moisture is the principal characteristic of the surroundings of the house.

(less than one third), and not one has died of *consumption*, though one died early with scrofula.

The skeptic will shake his knowing head and ask again, What does one example of this kind prove? In answer, I would ask whether, if the objector should find his own family dying around him by the same disease, under like circumstances, and should happen to have read the various correspondence and gained even the meagre, as he might deem them, statistical data I have presented, he would not then deem it the part of prudence to take it for granted that the fate of his wife and children looked very much like an illustration of the law? Whether this be admitted or not, I contend that, until the State or another individual has, by an overwhelming accumulation of evidence, refuted, what they may deem, my small proof, no physician or father ought to dare to neglect the evidence I have, even thus far, laid before him from educated physicians of Massachusetts; and among other data, he should weigh these examples.

I pass over Medway, Pembroke, Tewksbury, Sudbury*—in all of which are found cases of a similar, though perhaps less marked character, and shall close this part of my subject with the following statement, eminently illustrative of the truth of the law we are discussing. It shows also how this law has been acting for years, is acting now, probably not only in the township I shall name, but likewise in various other places in this Commonwealth—while the public, and attending physicians sit by, ignoring

* See Appendix D, for details.

its fatal tendencies, and allowing family after family to be cut down by residing where, I verily believe, God never meant that man should live and attempt to rear a family.

Many years ago, and before I had arrived at definite conclusions on this subject, I was visiting Franklin, Mass., on professional business, and I asked the physician whether "any portion of his town was peculiarly liable to consumption." His prompt response was "Nay." In a few moments, however, and in continuation of the subject suggested by the question, he said—"But I wish you would explain why three houses in this town have been famed for having had consumptive families in them."

Avoiding carefully all leading questions, and especially any allusion to the vague notions in regard to the influence of soil I then held, I desired him to make a rough drawing of the position of the houses, and to tell me the characters of the soil, on which they were built, and of the vicinity. I give a copy of that drawing in the subjoined diagram.

The houses A B C could not be situated in a position more favorable for an "*experimentum crucis*" of this law, supposing it to exist. Exposed to the north and east, their foundations rest on a soil permeated with water; the base of the hill, on which they stand, being skirted by meadow and pond, so that every north-east wind comes freighted with moisture upon them. Even the warm and genial sun strikes the hill at an angle, and as it were slides *over* rather than lights upon it, not penetrating, as when the rays strike at right angles to the surface

of the soil. Listen to the tale told by these tenements.

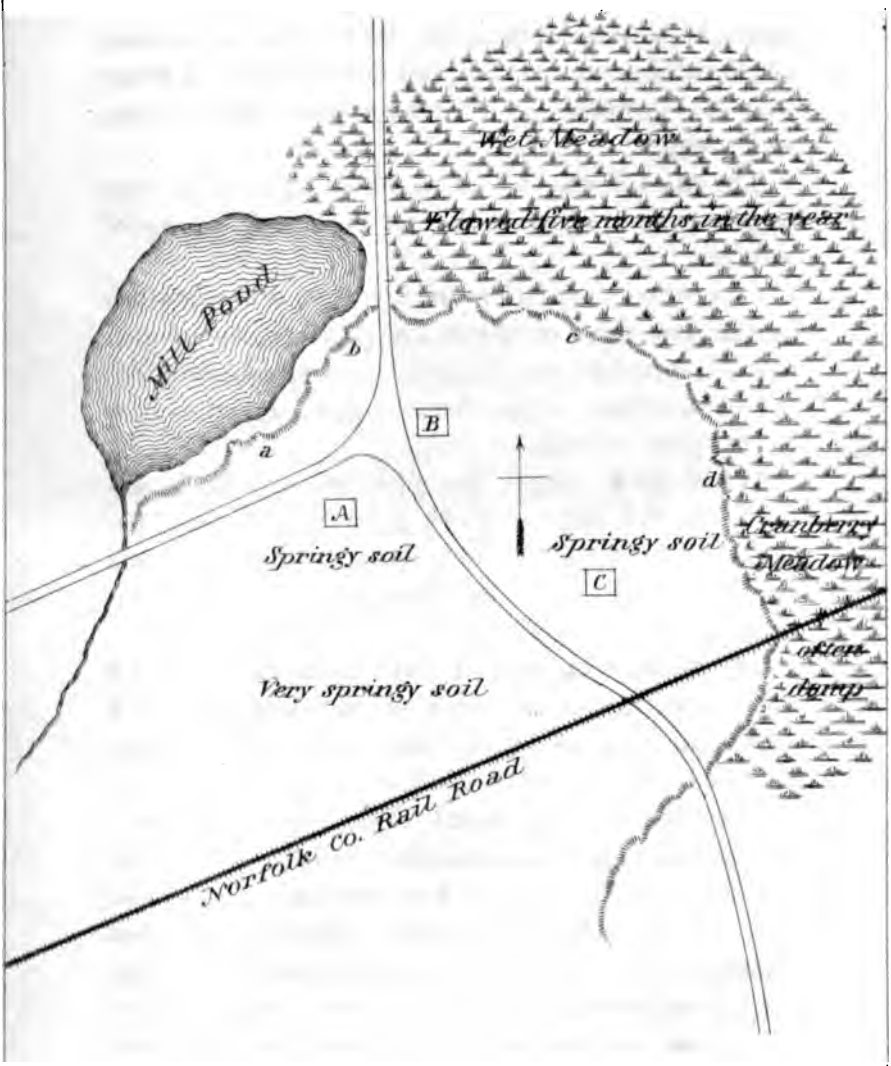
In one (A), formerly resided a woman who had been born on the estate.* She married, and had five children. The husband and all but one of the children sickened and died of consumption. The one surviving child became very feeble, took alarm, suspected the locality, moved away to what he deemed a more healthy location, recovered his health, and is now enjoying a green, healthy old age of upwards of 70 years.

Thus much for the history of this house, previous to the present occupants taking possession of it. These present occupants are not as healthy as farmers and their families usually are. The father has had hæmoptysis several times. The daughter has pains in her back, shoulder and sides of chest, and is under medical care. One son is like this sister. One son is healthy.

The second house, B. Parents and grandparents healthy. Parents have lived here twenty years. Eldest daughter bled—left home and gained in health; returned and died of consumption, October, 1855. Second daughter always at home; died of consumption in 1853. Third daughter has cough, is feeble, and unable to attend school in consequence; is, in the opinion of her physician, a doomed girl, to die of consumption. Fourth daughter, aged 22, has pains in her side; works irregularly; her physician is apprehensive of her. A son had cough at the

* She had five brothers or sisters, all of whom removed from the homestead, and no consumption appeared among them.

DIAGRAM, showing position of three houses, placed on a hill in Mass. in which for 50 past years, consumption has been very prevalent a,b,c,d, outline of base of hill. **A,B,C, houses.**



old homestead; he left and has improved his health. Second son, 18 years old, with depressed chest; weakly; left home and became better. On returning home, he became worse, and observed that, from *some* cause, he was not so well, felt less buoyant at home than in Vermont. Third son, 8 years old; a pale, sickly child.

The third house, C. Former occupants, parents healthy. Two children died of consumption, one of scrofula.

Present occupants, less healthy than other families in different parts of the town. Father, rheumatic; mother, healthy; one daughter died of consumption, one of scrofula; a son became deaf at eighteen or twenty years of age.

What think you of the illustration? Look distinctly at the facts. Of 14 grandparents and parents, 12 were said to have been healthy. Of the remaining 2, 1 has had hæmoptysis; 1 is rheumatic.

Of 21 children, only 2 have been healthy. Of the remaining 19, 9 have died of consumption; 2 of scrofula; 7 are sickly and weak, or evidently affected with pulmonary disease; 1 is deaf.

Why are so many sick? Why so many dead? Why cannot the children live well at their own homes? I attribute it to the location. If you had had half the evidence I have now given to prove that a damp soil is one of the great causes of consumption in Massachusetts, and it had been applicable to diseases of an intermittent type — fever and ague, for example — you would have had no doubt about

the question, but would have instantly declared the tenements unhealthy. But you doubt, perhaps, in regard to consumption, because it is not one of the medical dogmas of the times that consumption has any local origin, of such a nature as, I think, I have exhibited to you.

Having thus given you some facts, collected in Massachusetts, I pass now to: —

VI. — Confirmatory Opinions, Facts and Statistics, from Rhode Island, Maine and New Hampshire.

I have obtained returns from ten towns without the limits of the State; viz., from Maine, New Hampshire and Rhode Island. They amply support the views already presented. Briefly given, the reports from these towns are as follows:

Dr. Trafton, of Kennebunk Port, Maine, assures me that consumption is much more rife at the Port, where there is a clayey, moist soil and a coast exposure, than at Kennebunk itself — a fine township, higher, chiefly sandy, with many pine woods, and few, if any, meadows — precisely, in fact, those differences which, I am led to think, will often, hereafter, be found to exist between spots suffering in different degrees from consumption.

Dr. T. also assured me that a house, whose cellar wall is washed daily by the incoming tide (being built directly upon a creek, connected with the ocean), has been the residence of a family, every member of

which, except the parents, *have been born and reared, and have died of consumption, in that place.*

The childless parents have now moved away, in their old age, only to let another younger couple beget another puny set of children, as those already born are now becoming. Dr. T. mentioned this house to me, in answer to my question whether any household in his town was peculiarly troubled by consumption; and I judged from his remark, that, although he, doubtless, would not have chosen the place as a healthy location, he did not put the location and consumption as cause and effect — which *I* verily did.

Dr. Marrett, of Saccarappa, near Portland, gives the following statistics, on his own and Dr. Stone's practice.

Dr. Marrett says, "The whole town, with few exceptions, possesses a cold, wet and clayey loam soil." The "plain district has more of a dry, gravelly soil."

Dr. M.'s statistics of his own practice in the whole town, for eight years, 1842 to 1851, were as follows: All deaths, 66; by consumption, 21 — or 31.81 per cent.

Dr. Stone's statistics of his own practice, during the same period, for the whole town, were as follows: All deaths, 104; by consumption, 32 — or 30.76 per cent. In the "plain district" he had: All deaths, 68; by consumption, 11—or 16.17 per cent.

These data are in complete analogy with the statistics of Townsend, West Newbury, &c., in Massachusetts.

Dr. Allen, of Saco, Maine, than whom there lives no more intelligent witness — a practitioner of long standing — assures me that, in his own practice, for fifteen years past, he has noticed that, on two ridges of land, whose only difference consists of this characteristic of moisture of the soil, almost every family has been decimated on the wet part, while almost all upon the dry portion have escaped. This statement is a most striking exemplification of the views already given. It seems likewise to show that it is not *elevation* or *exposure*, or a certain amount of cultivation or woodland, nor any peculiar trade, &c., that is the cause of the malady; for, in all these respects, the two localities seem alike. One ridge is quite dry, the other is literally filled with springs. Nowhere can a spade be driven a few feet into the ground, without meeting water. In fact, in former times, the superstitious frequently had their friends, who had died of consumption, disinterred, and Dr. Allen invariably found the coffins filled with water, however shallow may have been the graves.

Dr. Sanborn, of Hampton Falls, N. H., gives statistics of that town and of old Hampton, which, at first sight, seem to give little support to my views. But I find, on accurate analysis of the returns, that in Hampton, two thirds of all the cases of consumption occurred on a ridge of land, nearer to the marshes, and where one fifth only of the inhabitants live.

So, at Hampton Falls: the inhabited part, that is, the dampest, has twice as many consumptive cases, in proportion to the population, as the driest and highest.

At Newport, N. H., Dr. Richardson speaks of two houses near a mill pond, and around which runs a river, the entire soil being thus made very moist. The parents, three children and a stranger lady, resident in the family, have died of consumption within four years. *A remaining son and daughter moved away to a drier location, remained cachectic for some time, and have finally recovered*—an example wholly analogous to what we have noticed at Franklin, Mass. How long will you shut your eyes to these facts, and your intellects to their importance, in your daily practice?

Drs. Hartwell and Tuttle, report from Farmington, N.H. Dr. Tuttle says the town is on low, moist land. He and Dr. Hartwell have both noticed that consumption is much more prevalent there than on the surrounding hills. Dr. H., from eighteen months statistics, gives as the number of deaths by all diseases, 43; of which 13 were by consumption—or 30.23 per cent.

Dr. Clough, of Greenland, has a town singularly but very distinctly marked by three classes of soil, viz., 1st, a higher, drier, sandy plain; 2d, a medium, fertile, rather moist portion; 3d, extensive low marshes. I asked for statistics, and he returns these: Population, 715, about equally divided in the districts; families, 150. During 10 years, 1847 to 1857, 3 persons died in the dry district, 5 in the medium, and 10 in the wet. Small statistics, but significant!

Dr. Hovey, of Atkinson, N. H. It is a dry, well-drained township, sloping very gradually to those adjacent to it. The first thought of Dr. Hovey was,

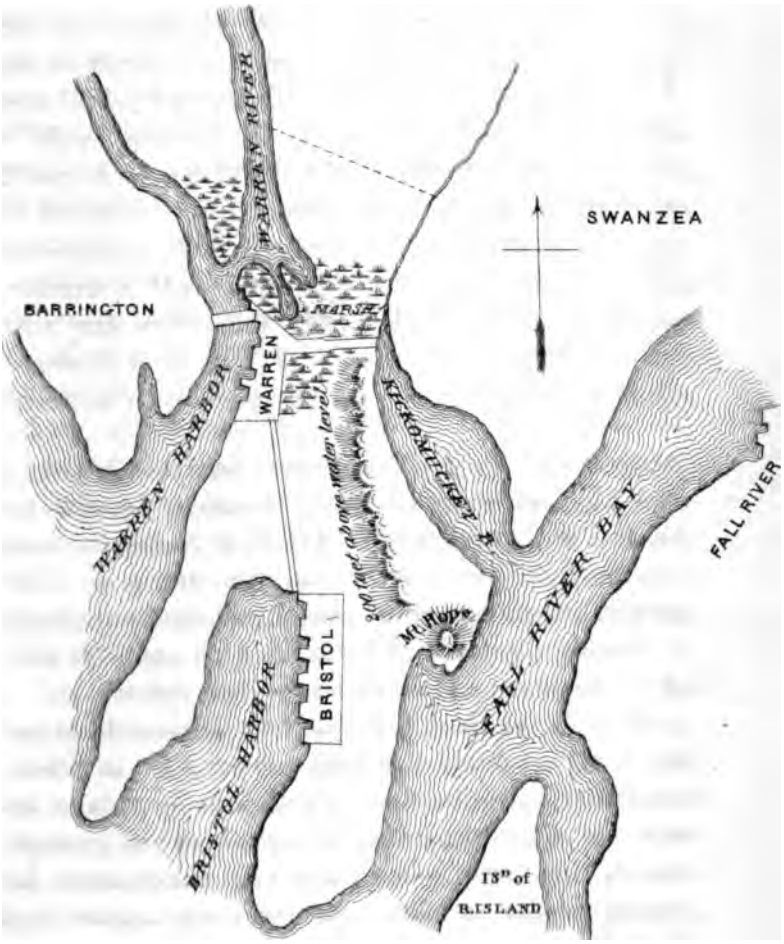
that the statistics of the town, in which he was born and had resided, and had practised medicine nearly fifty years, would not sustain the views submitted in this report. I begged for statistics, as I knew that he was acquainted with all the townspeople who had died. From the general characteristics of the town, I thought there would be but few cases of consumption in it. I was in doubt whether the law of dampness, acting so slightly as I thought it must, would show itself with sufficient distinctness.

Dr. H. writes, from a review of thirty years, and informs me, while giving the data, that he is convinced, that, though very small, they fully sustain the influence of dampness of locality as productive of consumption. Population, 606. Total deaths, 203; by consumption, 40. In driest districts, one died of consumption in every 56 persons; in medium districts, one in 15.50; in wet, one in 5. The proportion of deaths by consumption to total deaths, he found as follows: 9.75 in the high and dry, 17.64 in the medium, and 50.00 in the low districts.

Dr. Ellis, of Bristol, Rhode Island, has noticed that few persons are affected with consumption in Bristol, compared with the number found in Warren, a few miles distant. Bristol stands on a bold, rocky shore, washed by the waves of a bay, opening upon the Atlantic. It is defended somewhat, at the east, by a line of hills. Warren, on the contrary, is situated low, on the wet land adjacent to the marshes of the bay. The higher tides are apt to overflow them, at times, quite up to the borders of the town. There is, moreover, no defence from the cold easterly winds. It

DIAGRAM, showing relative position of BRISTOL to WARREN, R.I.

From a Sketch by Dr. J. James Ellis.



is but right to say, that the Rhode Island State Registration Report for 1859 throws some doubt on this statement of Dr. E. That of 1860, however, shows there is an unequal distribution of consumption in the various counties of the State.

May I not say that these data from Maine, New Hampshire and Rhode Island, afford nearly as certain evidence of the operation of this law of dampness throughout New England, as we have for its prevalence in Massachusetts? *A priori*, we must admit that *any* etiological climate-law, acting in Massachusetts, must extend over the New England States, so entirely analogous are they in their characteristics.

But if it extend over New England, an interesting question immediately arises, whether the same influence is spread over the United States. To decide what is public opinion or fact on this subject, I shall appeal to Drs. Forry, Drake, Blodgett, Lawson, and Coolidge, in his United States Army Report.

Dr. Forry* does not believe in moisture as the cause of consumption, nor that cold, *per se*, is necessarily so. I have the highest respect for Dr. Forry, as an able pioneer in the climatology of the United States; but the subject of soil-moisture, as the cause of consumption, was really never thoroughly discussed by him, as we are now able to reason upon it, from the returns made by the Massachusetts Medical Society.

---

* The Climate of the United States and its Endemic Influences. By Samuel Forry, M.D. New York; I. & H. G. Langley. 1846.

Dr. Drake,* one of the most vigorous minds and original writers of our profession, enters extensively into the topic, but he cannot grapple with it, as we are able, with our facts, to do. He doubts the effect of humidity, as a cause of consumption. He believes in a dry, cold climate as being rather unlikely to cause it. In this, we certainly agree. He certainly disbelieves the views often entertained, that a cold climate necessarily causes it. He thinks, and I presume all the profession will agree with him, that damp, unventilated apartments are bad for consumptive patients. But you see that he really hardly touches our topic.

Mr. Blodgett† (p. 474) comes nearer to our view when he says of "*climate*," "dry and warm are required for the relief or cure of pulmonary disease." Again: "In warm, very variable, with much humidity, the requisite conditions are wanting." And finally, he enumerates what is perfectly true: "*Dry* (his own italics) and equable districts are the great desideratum, though, in humid and equable climates, it is far less frequently induced than in cold and humid."

Dr. Lawson,‡ in his admirable work on Phthisis (page 241), takes the ground that moisture is a comparatively unimportant agent in the production of phthisis. But he does not really treat our subject,

* The Principal Diseases of the Interior Valley of North America. Second Series, &c. Philadelphia: Lippincott, Grambo & Co. 1854.

† Climatology of the United States. By Lorin Blodgett. Philadelphia: Lippincott, Grambo & Co. 1857.

‡ A Practical Treatise on Phthisis Pulmonalis. By L. M. Lawson, M.D. Cincinnati and New York: S. S. & W. Wood. 1861.

viz., the damp soil. He speaks of circumambient atmosphere, amount of rain, &c. But it is evident that Pau, for example, which has much rain, but whose atmosphere is, really, generally dry, owing to the quick absorption of rain by the porous soil, is very differently situated, and may be much drier, and better for a consumptive patient than another spot, where the soil or subsoil is perpetually filled with inherent moisture, and but very little rain falls.

But the most important, and by far the most satisfactory statements in favor of my general views, may be found in Dr. Coolidge's most admirable Reports of the Medical Statistics of the United States Army. To this I now call attention.

VII.—Medical Statistics, given in the Report on the Health of the United States Army; intimating the existence of this Law and of its wide operation over the whole of this Continent, contained within the limits of the United States.

Dr. Coolidge* has made the most valuable report, ever published on this continent, on the health of the soldier in different parts of our country. In reference to the subject in which we feel most interested, I quote the following very valuable opinion, as actu-

* Statistical Report on the Sickness and Mortality in the Army of the United States, compiled from the Records of the Surgeon-General's Office, embracing a period of sixteen years, from January, 1839, to January, 1855. Prepared under direction of Brevet Brigadier Gen. Thomas Lawson, Surg. Gen., by Richard H. Coolidge, M.D., Ass't Surg. U. S. A. Washington, 1856. Also Second Report, from 1855 to '59.

ally deductions from facts observed. In the text I shall give only summaries, and refer the reader to the Appendix* for more and very interesting details on this topic.

After premising that it may be generally considered of doubtful propriety for a compiler to present his own individual inferences, but that, in regard to the amount and ratio of phthisis in the several regions, he feels called upon not to adhere to his original intention of being simply a compiler, he makes the following statements in his first report (p. 497):

"The most important atmospherical condition for a consumptive is DRYNESS." * * * "Next to DRY is an EQUABLE temperature." * * "A uniformly *low* is better than a uniformly *high* temperature." "The worst possible climate for a consumptive is one with long-continued high temperature and high dew point."

So, too, if we examine particular facts, given in his second report, they are eminently significant.

Assistant Surgeon Robert Bartholow writes (p. 306), March, 1859, from Fort Bridger, in Utah, "in the upper cold regions," "very dry" atmosphere, soil of valley "light, porous, sandy, through which the water percolates constantly:"

"The most interesting fact with regard to the influence of this climate upon the thoracic affections, is the amelioration and cure of pulmonary, tubercular disease. Not a single case of phthisis has occurred at this post, and those, who came here laboring

* Appendix F.

under the symptoms more or less advanced, are notably improved."

Assistant Surgeon Basil Norris writes, from Fort Clark, Texas, September, 1856: The Fort "is situated on a healthy site, overlooking the surrounding country. It has a *dry* and equable climate." "Pulmonary diseases are rare. The dry and equable climate has been beneficial to a few cases left in the hospital, and at the post none have originated." —(p. 190.)

Similar remarks are made by Ass't Surg. Robert Bartholow on Camp Scott, in Utah (p. 291). "All who came hither, laboring under the incipient or well-established symptoms of consumption, speedily improved." The dryness and equableness of the climate is noted as the most important element in the cure. Conjoined with this, however, were improved hygiene, and mountain height.

From the above, am I not allowed to suspect that the law of moisture of the soil as the cause of consumption prevails in other parts of the United States more generally than in New England?

Does this Law hold good in other parts of the World?

In order to show more precisely the facts, in regard to the dampness or dryness of various places, and their reputed influence on phthisis, I have endeavored to obtain the characteristics of the soils of various places named, as peculiarly advantageous for phthisical patients, as given by Sir James Clarke, Messrs. I. P. Knox, Dix, Henry Rhind, Alexander Taylor,

Dr. Burgess, John McClelland, James R. Martin, C. R. Hall, Twining, Beddoes, Walter S. Baker, Dr. Jourdant, Lawson, Mühry, Boudin, Poissac and Lombard, writers that treat of all the climates of the known globe. I found as follows:

Places, of whose soil I can find any sufficient account, and which are said to be good for consumptive patients as residences; for example: Pau, Villa-Franca, Malta, Madeira, Canary Islands, Azores, Bermudas, Bahamas, Undercliff, St. Croix, St. Thomas, Egypt, Nice, Mexico, Algiers, have essentially dry soils, and, though some have great rains, the atmospherical surroundings of the patient become rapidly dry, even after rain.

Others, such as Pisa, Naples, Milan, Parma, Mantua, Verona, Exmouth, Sidmouth, all said to be prejudicial to consumptives, have essentially moist soils.

Notwithstanding all this, Mühry,* one of the ablest of European writers, doubts the influences of moisture; but he has no facts, strictly speaking, bearing upon our precise question.

Boudin,† also, an equally great writer on this subject, still holds to the opinion that moist, intermittent fever countries prevent phthisis.

Dr. Lombard,‡ of Geneva, claims nothing for dryness as a preventive. But he and Mühry both

---

* Klimatologische Unstersuchungen, &c. A. Mühry. Leipsic and Heidelberg. 1858.

† Traité de Géographie et de Statistiques Medicales, &c. Par I. Ch. M. Boudin. Paris: Baillère. 1856.

‡ Les Climats des Montagnes, &c. H. C. Lombard, Geneva and Paris. Joel Cherbuliez. 1858.

assert that, at a certain height in the Swiss mountains (Mühry states the same of the whole globe), consumption is unknown. They attribute the fact to the rarefied air. I would claim much for the dryness, which necessarily accompanies the height.

The sum total of our investigations into European works is, that, while no writer attaches the same value to moisture of the soil, that I have been compelled to do, from my examination of New England, the fact that so large a proportion of places, famed for giving relief to consumptives, have dry soils, is, to use the mildest term, a peculiar coincidence.

I do not think, moreover, that the subject has ever been fairly investigated with reference to the influence of *soil-moisture* on the prevalence of consumption, as I have investigated it in these researches. In confirmation of this assertion, I would remark, that although I brought the subject (during a visit to Europe in 1859), as fully as I could before men of experience in vital statistics in England, and on the continent, I never found but one person who, practically, could give any evidence on the subject. This gentleman was a physician in the highlands of Scotland, whose name, I regret, has escaped me. He had practised in two valleys, one of which has a great deal of moist soil, and consumption is very prevalent there, while the other is much drier and has much less consumption. The physician had not apparently connected the two facts, in the relation of cause and effect.

VIII.—Results of my own Practice, since I first became convinced of the Truth of this Law.

(a) *Statistics from my private records of Cases.*

Out of 201 patients, from the country townships of New England, distinctly affected both with the rational and physical signs of consumption, such as distinct râles under the clavicle, &c., I find that 109, or more than one half, are reported to be residents *on* decidedly damp places, and one half of the remainder have lived in houses having damp cellars, or their houses are situated *near* damp localities. Thus *three quarters of all these patients* have resided, *where dampness of the soil is a prominent characteristic.* Somewhat less than one quarter resided in dry places.

(b) *Results of my Practice, when applying this Law to the Prevention or Cure of Consumption.*

Since I became convinced that a residence, on or near a damp locality, is actually promotive of consumption, I have acted fully up to that belief, and have had satisfactory results. The following statements I make deliberately, for they are true. The cases, to be alluded to, have been under my own care. I have seen whereof I speak, in every particular.

First. Persons having had hæmoptysis and irritation of the lungs, and who have apparently been threatened with phthisis, but without physical signs, have been completely restored to health, by changing their place of residence, according to the princi-

ples inculcated in this address, viz., by going to live in a dry locality, and leading more active lives. These patients have considered the change of location as the *prime* cause of their improved health, although I did not neglect other remedial measures. They perceived, moreover, the much greater balminess of the atmosphere, in its influence on their lungs, in these places, when compared not only with a city atmosphere, but with that in wet, country locations, very nearly adjacent to their own residences, equally beautiful to the eye, seeming, in fact, to the majority of persons, equally healthy. I am myself acquainted with two such spots, and the ascent of a long hill alone separates them. Doubtless, many of you have noticed similar differences in your own towns. Between the climatic influences of two such localities, when you drive through them, especially at night, when the caloric, luminous, and perhaps still more, the actinic rays of the sun are not shed upon either, these differences upon your healthy bodies appear immense. The two are no more comparable than the mild, equable, temperate atmosphere of a balmy day in September or October, and that we experience during the chilly north-east storms of early spring. Does it therefore seem incredible to you that such differences, even when not so appreciable during the waking hours, may materially influence our health during sleep, when our natures seem most susceptible of evil influences?

Second. I have had patients in whom physical signs of an undoubted character existed — such as crack-

ling under the clavicle, diminished vesicular murmur, and some dulness on percussion — who, by removal from towns and localities lying under, or near, the influence of dampness of the soil, to another town very dry, have experienced immense benefit.

In one young lady, crackling disappeared almost wholly from the entire upper lobe of one lung, after a residence of six months in a very dry town, selected for the purpose, because the resident physician assured me that the town was very dry, and that cases of hæmoptysis that would, he thought, have terminated in fatal phthisis, in a town on the coast, where hé previously resided, got well in his actual abode. The place was very different from the spot where she was taken ill, and where she resided, when I was first called to her, as hopelessly ill of hæmoptysis and consumption. And yet, were I to show you that very homestead, you would say it was one of the loveliest possible, with its long avenue of wide-spreading trees, on luxuriantly fertile soil; its quaint and picturesque, ancient architecture, indicating apparently that it had been the abode of many generations of families, of refined tastes and ample fortunes. Nevertheless, should you enter it at midday, at the hottest and most sultry hour in August, it would be like entering a cellar. I visited it, panting with the heat of a summer's sun. In a half hour I spent there, I was so chilled that I quickly sought, on going out, the genial influence of the same sun, I had, previously, gladly escaped from, in order to overcome a certain depressing coldness, that painfully affected me. This was the most re-

markable case I ever had. The lady was subsequently married and lived a few years, and finally died of phthisis, under the following circumstances. Having got nearly, if not quite well, she begged, after many months residence at the selected spot, that she might be allowed to come nearer to the city, for the sake of her husband's business. In vain I protested. She, however, decided to remove, and although healthy sites were chosen in the country, ten miles from Boston, none were so dry as that first selected. Gradually, the cough returned, and fatal phthisis was the result.

I have no doubt, however, that life was prolonged by the first change. I think that had she remained at the place at which I first visited her, she would soon have died; and that if she had remained at the place which I chose for her, and where she so rapidly improved, she might be now alive.

I have had other cases of a similar nature, in which the rational signs were very threatening, with slight but unequivocal physical signs. In these, both classes of signs have disappeared under a change of place and rational treatment—the change, however, being deemed an essential element in the treatment, and, in my opinion, the most important part of it.

Third. I have had another and equally significant class of cases, in which undoubted and more extensive rational and physical signs of consumption have existed for a year or more, and in whom, even now, the physical signs are sufficiently well marked, though showing less irritation of the lungs; while

the constitutional symptoms are very much better, under similar changes of residence.

In this catalogue are two married ladies, who, for years, have lived in a spot chosen by me because of the dryness of its soil, its elevation above the surrounding country, and its exposure towards the southern sun. These have been ill for several years, and had been so, when I first saw them. Both were living in damp localities; both moved to the place thus chosen, and there they established their family abodes. They have never had a desire for any permanent change. Both, it is true, have occasionally gone south. They both recognize and value the difference of effect upon their own lungs, between the air in the spot selected, and any other they may be called upon to breathe. Especially do they now feel the difference, in this respect, between their present location and the wet, meadowy abodes, in which they formerly resided, and where some of their friends now live.

To sum up the results of my experience, and my present judgment, on this subject, as a matter of therapeutics—I dare not neglect the abundant evidence of the influence of locality, as a cause of phthisis. Deeming it, in fact, one of the great causes of consumption in New England, I, of course, think of it in every case I meet with, and make it a rule to endeavor to learn, more precisely than I formerly did, the nature of the soil on or near which my patient is situated, and especially its character as to dryness or moisture, to which, when at home or on business, he is habitually subjected. If I find a

person living in a house, evidently damp or wet, I feel bound, if he be not hopelessly ill, to urge his instant removal to a drier location. I do this on the same principle that I should direct a man, with intermittent fever, to remove from a so-called malarious district; as I should urge a flight from Charleston, S. C., by a man threatened with yellow fever during its prevalence in that city; or finally, as I should press for the instant removal of a typhoidal patient from the vicinity of a cess-pool. If you ask me why I do so, what cause *can* exist in a damp soil, productive of consumption, I simply point you to these previously given facts and inferences therefrom, and reply that we know no more what is the essential element or mode of procedure of this obscure cause of consumption, than we know of the causes of fever and ague, yellow or typhoid fever, above alluded to. If we wait until we understand the precise operation of causes before we take action, our action is, or may be, vain.

IX. — Apparent Exceptions, given by different Physicians, to the view of the subject presented in this Address.

The correspondents of one hundred and thirteen towns answered categorically and often monosyllabically in the negative, to the question as to the greater prevalence of consumption in one part, than elsewhere in the town. In other words, these practitioners have never seen in their town any particular locality, peculiarly liable to the prevalence of con-

sumption. Thirty-nine of these answered doubtfully in the negative, or suggested some other reason than locality as the cause of its greater prevalence in one part of the town than another — *e. g.* the hereditary character of the affection in certain families, the peculiar trade, bad ventilation, a dusty atmosphere, &c. Two of them only give statistics — viz., Dr. Alden, of Randolph, and Dr. Cotting, of Roxbury. I refer elsewhere* for these data. I would, however, make the following criticism upon them.

There is a fatal omission in both, viz., that they give no means of comparing the number of deaths by consumption in the wet districts, either with the population or with the total deaths by all diseases. Now it is obvious, that unless we have one or the other of these latter data, we cannot make any assertion in the premises. For example: Dr. Cotting says there were only three deaths near the "mill-pond," and "but two on the ridge between the empty and full basin." But unless we know the relative population in these districts, or the total deaths, we are still in the dark in regard to the comparative rate of mortality from this cause. His own table, "Localities of the Deaths by Consumption," admits of doubt in regard to the conclusions he draws from it. For certainly, Dr. Cotting will allow that much more than two-thirds of the surface of the city of Roxbury cannot be called low. But only two-thirds of all the deaths in the city are found in the high localities, whereas, if consumption pre-

* Appendix F.

vailed everywhere alike, we ought to have many more than two-thirds.

It is plain, however, that we argue in vain, owing to the want of a necessary element of the evidence.

Again, it may be remarked, that as Roxbury is a somewhat densely built city, we may not be able to discover the influence of any telluric cause, as easily as in a township, more sparsely built upon, and extending over a larger space, of miles, perhaps, in extent.

"Every year," says Dr. Cotting, "brings accounts of some new and peculiarly favored locality, and every year brings also statistics, proving that any boasted exemption will not not bear the test of careful investigation. From the East Indies and the West, from isles of the ocean and those of the Mediterranean, from Western prairies and from Italian skies, we hear the same stories of the universal existence, prevalence and inexorable progress of pulmonary consumption." Upon this question I have simply to say, that such men, as Mühry in Germany, Lombard in Switzerland, Boudin in France, Coolidge in America, upon well-authenticated statistics, hold a totally opposite opinion.

Dr. Alden's data are subject to criticisms similar to those made on Dr. Cotting's. They afford no means of really comparing the number of deaths by consumption with the total deaths or population.

I do but justice, however, to Dr. A. in saying that he believes that a residence in a low damp spot is promotive of all diseases, consumption among the rest.

I have thus stated the opinion of those who differ from my estimate of the influence of dampness of the soil, as a cause of consumption.

I turn now to some important practical questions and suggestions, naturally arising from the subject.

ARE THERE ANY LOCALITIES IN NEW ENGLAND WHICH, FROM THESE INVESTIGATIONS, WE SHOULD DEEM UNFITTED FOR THE RESIDENCE OF CONSUMPTIVE PATIENTS?

I believe that all towns, parts of towns, houses even that *rest on* damp, cold soils, are by that very fact peculiarly liable to the prevalence of consumption. I believe that similar locations *near* wet meadows, rivers, marshes, &c., though less subject to the law, are nevertheless, in a lesser degree, promoters of consumption in the families resident thereupon. Even hills, with a clayey subsoil retaining moisture, though not absolutely evil, are less good than a perfectly dry, porous soil, removed from any moisture. I suspect, moreover, that we ought to inquire more particularly than we have heretofore done, as to the exact condition of the cellar of a residence, whether it be damp or dry, even when the surroundings of the residence may seem perfectly good. All these statements I make, not on theory alone, but from actual experience, I think, of their truth, as learned from my professional practice during the past four or five years.

Again: on theoretical, but I believe just grounds, I have objected to allowing consumptive patients to

reside in houses, *heavily and closely* shaded by trees and vines; because the rays of the sun being prevented from reaching such abodes, dampness and extra coolness are thereby promoted. I know of a house, which I should deem unfit for a consumptive to reside in. It is situated in New Hampshire, about fifty miles from Boston, on rather a low spot of ground. Its wooden sills rest, almost immediately, on the wet soil. Trees, thick and close, overshadow its roof, and woodbines cover its walls. When I visited it, one consumptive child was dying, and the sister was beginning to fail. I objected to the trees and vines, as tending, in that instance, to promote dampness and coolness, as above described.

Following out this idea, I have at times *thinned out* trees around a residence, where a family was growing up, and among which one had already shown signs of tubercular disease.

Looking at the subject from the opposite standpoint,

ARE THERE NOT PLACES WHICH, ACCORDING TO THESE INVESTIGATIONS, WILL TEND TO PREVENT PHTHISIS, OR AT LEAST, IN WHICH CONSUMPTION WILL PREVAIL MUCH LESS THAN ELSEWHERE, OR POSSIBLY NOT AT ALL?

I do not absolutely know a single spot in New England, where consumption can be said, by statistics, never to have occurred. In choosing a site for a dwelling-house, the great desideratum is to obtain, not a perfectly *arid* place, for no such spot could be

inhabited by man, but it should be in a portion of the township which is neither so high as to be exposed to violent gusts of weather, nor so low that moisture will collect around it. Let it be on the side of a hill, or plain, open to the south, and, if possible, defended from the north and east, on a dry, porous soil, through which water freely percolates, and which, even after a rain, retains little moisture. Let the cellar be dry, in which no mould will collect. Such a situation, I believe, on theory (confirmed by my general experience), if it can be found in any town in New England, will be more favorable for the consumptive, and less likely to have consumption appear in it, than another spot, with a different exposure, and having a wet soil. So much for theory.

Places which Experience has taught me are Residences favorable for Consumptives.

There are two distinct classes of townships and localities, which I should place in this category. They are either inland towns, or islands eight or ten miles from the shore, and thereby being, in reality, under an oceanic climate. Doubtless, there are many more localities, besides those I shall name, scattered in almost all the inland portions of the New England States. These spots must be eventually discovered by the registration agents, or by the careful and conscientious investigations of resident physicians. I have had actual experience of the advantages of placing patients at Grantville, a district in the township of

Needham; also upon the drier portions of Sharon and of Canton, and at the Isles of Shoals. All these towns lie about ten or fifteen miles inland, while the islands are about the same distance from the coast. The former have the land; the latter, the oceanic climatic influences. The townships are remarkable for the dryness of their soil, and are generally somewhat elevated. In every one of them, I have had patients improve greatly, and some, whom I believe would have died in low coast, or wet inland spots, have recovered, or have speedily improved from serious symptoms. The patients have all described a decided and peculiar effect, as having been produced on their lungs by the atmosphere of these places, whereby they were enabled to breathe more easily.

The Isles of Shoals are off Portsmouth, New Hampshire. From the reports of physicians I have little doubt that Nantucket, Martha's Vineyard, and possibly Block Island, lying south of Massachusetts and Rhode Island, must be likewise useful.*

It may be objected, that in suggesting an island, I virtually ignore all my previous statements, in regard to the influence of moisture, as a cause of consumption. I answer, 1st—That it is evident that a small island, with an oceanic climate, may and probably would produce very different effects on a patient from those caused by a place on low and damp land. Hence the two places are evidently under wholly different influences. The two spots are not analo-

* I am also inclined to believe that Nahant and Winthrop, rocky promontories projecting from the coast, will prove favorable sites.

gous. But, 2d—In the places I have named, I, in reality, do not vary from the rule of dryness of the soil, for all of them are either mere rocks, rising out of the ocean, with no marshes near, or they are masses of sand, so to speak, and essentially dry of character. Hence they do, in reality, fall within the rule—only they have the oceanic atmosphere instead of the land atmosphere, encircling and covering them.

Whether this is really a correct explanation or not, I am certain that, in many cases of early phthisis, the tonic, clear, soft air of the Isles of Shoals, in summer, has been of immense service. Two patients spent the winter there. In one patient, a crackling throughout the whole of one breast disappeared, which I fear it would not have done, had the patient remained in Boston. The winds were violent, but the temperature was less severe than in corresponding places on the shore. These winds will, however, always prevent many from residing at the Shoals during the winter, unless, perchance, the inherent healthfulness of the situation, and the superb marine views, that one can enjoy there, should, in some future time, cause a Sanatarium to be erected, properly constructed to obviate, at least in part, these difficulties.*

* It is part of my medical faith, that, within fifty years, our community will occupy this and its kindred islands, as places peculiarly fitted for many of our citizens, who prefer to remain near home to seeking health further south. They will be in some measure, to New England, what the Isle of Wight is to Great Britain, although the beauties of the two places will be forever very different, and the climate of the Shoals less gracious than that of the mild, almost tropical, airs of Undercliff, or that of the islands of Nantucket, Martha's Vineyard, on our own shores, which experience some of the genial influences of the Gulf Stream.

General Summary of these Investigations, and of, what I deem, the logical Inferences the Public and the Profession should draw therefrom, with some Remarks on the Duties of the State, of the Public and of the Medical Profession, in relation to the Subject.

Commencing these investigations without any thought of ever arriving at these results, but simply with a hearty faith that every sincere student of God's laws on this planet will always find *more* than he can dare hope for, I have been led to, what I deem, one of the most important results of my professional studies.

By the examination of the State Registration Reports, all imperfect as they are; from the opinions of physicians, given in correspondence to me from one hundred and eighty-two towns in the Commonwealth; from the still more valuable statistics, afforded by some physicians in Massachusetts and her sister States; from the Army Reports; and finally from my own experience in practice, I have come to a firm belief in the following propositions:—

First. *Consumption is not equally distributed over New England.*

Second. *Its greater or less prevalence depends very much upon the characteristics of the soil on, or near which the patients affected with it have resided.*

Third. *Moisture of the soil is the only known characteristic that, so far as our present investigations have gone, is connected with the consumption breeding districts.*

FOURTH. *An attention to this law in the development of consumption in New England (now first, nearly, if not quite, proved to be true, by the analysis of the data which your courtesy has afforded me), I have found of great advantage in my professional practice.*

To the first three propositions, I have given you, I hope, sufficient evidence to command your close attention hereafter, in your various circuits of practice, even if they do not immediately gain your implicit belief. To the last proposition you, of course, will give just that amount of credence you think due to my judgment and my integrity.

But give me leave to say still further, that you have no right, I think, as honest men, to throw aside evidence, however trivial in certain respects it may seem, with an ill-suppressed sneer, or the simple remark that you, as individuals, cannot find any proof of the truth of my statements, in your own city or township. By so doing, you virtually declare that all the evidence given by your friends and neighboring physicians, throughout the State and adjacent States —quite equal probably to yourselves, in their opportunities and powers of observation, and from which evidence I have simply drawn out the essential truth —is of no worth whatever against your own individual opinion.

Allow me to press this view still further home upon your intellects and consciences, by a renewed appeal to the terrible mortality from consumption, already alluded to (p. 88), and my remarks thereupon. Let me, also, in this connection ask, if it be not

possible that some of the cases of what is now evidently hereditary consumption, in certain families, may not be really the legitimate results of some ancestor's unfortunate place of residence. This may seem a peculiarly fanciful suggestion, but is by no means incredible. Although we cannot, at present, solve this and other important questions, naturally connected with the subject, I claim that the data, already given, ought, at least, to command the earnest attention of every member of this society.

If these things are so, what ought the State, the individual private citizen, and the Medical Profession, to do in the premises?

Let me say a few words on each division of this subject.

(*a*) The State has been and is now recreant to its duties, as a conservator of the public health, in not having, long ere this, carried out not only this but similar investigations upon all the diseases of New England. When I commenced my investigations, I arranged my questions with the sole purpose of comparing the results, obtained from my correspondents in different towns in regard to the hygiene of the towns, with the mortuary statistics of each, as given by the State Reports. I spent many precious hours examining the original records in the archives at the State House. But I finally gave up the attempt as utterly vain, as I found that they were, at that time, unreliable for particular towns, though, for the State at large, some general averages might be obtained. I hope, under the new law, better

things are done. But I sincerely believe that very little of valuable information on the topographical distribution of disease will ever be accomplished, so long as the registration of vital statistics is left in the hands of men, non-professional, and who have no just appreciation of the difficulties or the value of such investigations. The State has spent its thousands for registration, and whatever good may have been done by the money thus spent, it is a lamentable fact, as has been stated by one writer, that if the Commonwealth wanted to know where would be the most healthy location for the site of a hospital, prison, or almshouse, it could not obtain the information from its own records; and to-morrow, if the question were on the selection of a site for a normal school, it would be decided as much by the money power, as by hygienic laws. Such institutions should be perfectly situated, and able to carry out all hygienic laws. The normal school should not only teach these laws, to our future teachers, but the school, hospital and prison should be themselves models, in every respect, of obedience to those laws.

As much should be done by the legislature for public health, as is done by it for agriculture and education. Certainly, a Board of Health, composed of the ablest of the profession, and of others interested in vital statistics, is quite as important as Boards of Agriculture or of Education. Such a board could properly investigate every question of this kind, and if efficient, and armed, as it would be, with all the power of the State, it would gain data for the elucidation of any medical question, which no private individual could obtain.

(*b*) The public should correct its own views upon the whole subject of the planting of cities and villages. It should not allow speculators to run the risk of contaminating every family that may subsequently colonize a spot, the best fitted, perhaps, for the promotion of consumption. Now, the track of the railway, or the wit or reckless energy of the owner of some swamp, may be the sole reason for erecting a station house, and thereby promoting the early erection of dwelling-houses near by, on localities totally unfit for human habitations. I know of, at least, two villages thus built, in total contravention of this law of consumption. To one I am called, I think, oftener for cases of consumption than to any of its neighboring townships.*

Such villages might probably be much improved, if not made perfectly healthy locations, by thorough *under-drainage*. The public, however, is not aware of the value of such drainage. It may be that the suggestion will seem an infringement on private rights, but I am inclined to think that this whole matter of the location of cities ought to be somewhat more under the control of law, than it is at present. No man or body of men has a right to set up a nuisance. If a man has not wisdom or generosity enough to forbear inviting the public to live in locations that are, in themselves, nuisances of the worst kind, then public law ought to restrain

* This village was commenced only a few years ago, and the greater part of the land directly adjacent to it can be put under water at any time, according to the caprice of a mill-dam corporation, which commands the village stream. Can anything be more absurd?

him, as it would restrain him from doing any other obviously evil thing to the community.

(*c*) What can private individuals do in this matter? Let every one, if possible, keep himself and family away from any permanent residence in a house whose foundations are constantly surrounded by the exhalations from a damp soil of meadow or marsh, or even hill, that is full of springs, and which consequently keep the cellar of the habitation moist and cold. If perchance ignorantly he has erred, and finds a puny set of children growing up around him, in a house thus situated, let him take warning and flee from it, before it be too late. This is no fancy sketch. Our statistics prove the possibility of a childless old age, in consequence of too long a residence in such a place.

What should the Profession do, in reference to this Subject?

Finally, Gentlemen, what ought the Profession —what ought we, individually, to do in our respective localities, and as members of a Profession which ought to be the proper guardian of the Public Health?

Persuade the State to establish a Board of Health.

We are bound, as already stated, as a body, not to let the Legislature have peace from our annual petitions, until a system of investigations, similar to, though more thorough than that which I have presented in this Address, shall be made on the topographical distribution of all diseases, by an able and

appropriately elected State Board of Health. I may seem unduly earnest, but it appears to me that our Society could not do a better act, one that will eventually be of more service, not only to the inhabitants of this State, but, by its example also, to other States, than by united and persistent effort to induce the State authorities to establish a State Board of Health, by whose agencies all these great questions, now utterly ignored, may be investigated. Under such a Board, and with such objects, vital statistics would become a matter of much more personal interest than it is at present.

Endeavor to use this Law in a Prophylactic point of view.

But the results at which we have already arrived, even in these investigations, ought to come home, I think, to the judgment and consciences of every member of the Society, in his daily walk of practice. There are, I doubt not, in every township, one or more families, that are slowly being undermined in health; members of them are either preparing to fall victims to consumption, or, if perchance they escape with puny constitutions, their offspring may be essentially cachectic and tuberculous, thus entailing misery upon generations yet unborn. And all this is being done, as I fear, in pure ignorance of one of the great primal laws of the development of consumption in New England. You will readily imagine what I, at least, claim, that it would be the duty of every member of this Society to do in a like case. He should declare, in terms not to be misun-

derstood, that as parents who go on year after year, living in such an abode and having children born unto them, are virtually the makers, so they are by as certain, though perchance slower process, the slayers of their race! This doubtless seems severe; and in avowing such an opinion, in any particular case, you may meet not only all the violent opposition arising from ignorance of Nature's law, but also the more powerful influence of pecuniary interest—of affection, perhaps, for a venerated homestead. Parents may perhaps have entered the abode after confirmed adult life. They may have lived many years on the spot. Every birth has added a new charm, and a new and sweeter association to it. Their own healths have not been *materially* influenced. They will argue, as they may think, very philosophically, when saying, "We have lived here twenty years, and *we* have not died of consumption. How, then, can it be the abode that produces the disease in our children?" This is also, Gentlemen, no fancy argument. Almost the precise words have been used to me. In vain, perhaps, will you say that the argument wholly falls to the ground, because the two cases are not alike; the tender and sensitive nature of childhood being much more susceptible to all external impressions, than is the hardened nature of adult life.

The reasons why our argument fails of its object, and the parents still cling to their fatal abode, may be various, but one of the most cogent is the fact that neither public opinion nor the opinion of physicians has ever taken the ground I now assume.

To that point I would endeavor to bring you, and, through you, the public at large.

Use the Law in the Treatment of individual Cases of Disease.

But we shall all be thrown more closely in contact with the operation of the law of soil-moisture, when we come to the treatment of individual cases. I would draw your attention to a few of them.

We may meet with a patient suffering under what is sometimes inaptly called the "pretubercular condition," where there is a general disturbance of the system—a *good-for-nothingness*—a languor, in fact, of body and soul, in the performance of their functions, perhaps a slight dyspepsia, some emaciation and debility—a little cough, but without *physical* signs of pulmonary disease. If such a patient have been residing under the circumstances named in this Address, as promotive of consumption, *it will be our first duty to urge him to leave the spot.* If he be living in the northern rooms of the house, where no sun can reach him, especially if the rooms have a damp, bleak exposure, he should remove to one which is bathed with the warm rays of noon. I have, in two cases of debility analogous to that described, seen great and immediate benefits result. One patient delighted in sitting hour after hour with the full force of the sun lying upon her whole form below the head. She seemed to imbibe strength and life from this, to her, novel sun-bath.

Do we not all of us, even while in perfect health, unconsciously recognize by our lungs, if in no other

way, the oppressiveness of a room which, during any period of the year, has been, for any reason, shut from the sun's rays, even for a single day? We do not breathe as easily, and the mind becomes sluggish in such a place. How much more, then, should we guard those whose lungs are threatened with disease, from this extra suffering! Yet how utterly regardless is this community of all consideration of the influence of sun-light on health, though very earnest, perhaps, when the question arises of preserving the color of a fine painting or the brilliant hues of an expensive carpet! I write not poetry, but simple fact, when I say that on these occasions, sometimes, in our gross ignorance of God's laws, we risk blanching the human "face divine," in our eager desire to preserve a mere work of art or an expensive luxury. Pardon this apparent digression from the main current of our investigations, to which I now return.

Still more should a removal be urged if any, even the most trivial, of physical signs of pulmonary disease be found. A short distance, even of half or quarter of a mile, may do much good; but I should prefer to have such a patient remove at once to one of the places already known, or which may hereafter be found to be drier and more favorable for him. It has been stated that, in my zeal for retaining our patients in Massachusetts, I oppose entirely their removal to the more southern climates of Florida, Cuba, and of Europe. Nothing could be further from the truth; but where one is able to travel for health, thousands are fastened by the iron grasp of necessity to their native soil, and to but a very small space of

even that. They cannot leave their own village. This law offers up some chance for even these.

Use it so as to cut off one of the main Causes of Consumption in New England.

But the most important result, that I hope will arise from these investigations, is on the future *prevention*, rather than the cure of phthisis in Massachusetts. We have, in a previous portion of the Address, seen that, in some townships, twice or thrice as many die in the wet as in the dry districts. If this be so, and if an analogous state of things exists generally in Massachusetts, we must so indoctrinate our people that all wet spots shall be avoided as places of residence. No villages should be allowed to be planted on wet meadows or such like places, however much cupidity or convenience to railways may tend to induce capitalists to place them there. I am well aware of the evil influence such an opinion would have upon many public and private residences, now or hereafter to be occupied, while it would justly raise others in the estimation of the people. If, however, consumption can be, in the least, checked by such doctrines, it is our duty to proclaim them, in spite of all considerations of a pecuniary nature. If we once bring the public to this belief, we shall cut off, if not the "tap-root," at least one of the principal roots of consumptive tendencies in New England.

In conclusion, Gentlemen, let me say, that, I am sure, you will not doubt that I have full confidence

in the truth of every assertion I have presented to you; and let me beg each one of you, in terms similar to those I used in commencing my Address, to ponder well what I have presented, and to bring it all to the test of your unbiassed daily experience. If the law I have announced be founded in Nature, it will stand, in spite of your individual opposition. If, perchance, I have unwittingly led myself and others towards error, by your efforts shall I, and many more who now believe as I do, be sooner brought back to Truth.

APPENDIX.

B.*

In June, 1854, at the request of the Massachusetts Medical Society, I undertoook to report on the following question:—

"Pulmonary Consumption: its relative mortality in different regions of the State; and the real or apparent connection of this mortality with the physical character of the different regions, and with the social and industrial condition of the inhabitants."

Accordingly, I issued the following series of questions, on three separate occasions, viz., January and March, 1854, and February 28, 1858.

At the last issue, I appended the note, dated February 23, 1858.

Returns from all the townships in Massachusetts (325) were made. Upon 183 of them, the Medical Opinion, alluded to in the Address, is based.

This Medical Opinion has been derived in the following manner. If a correspondent, in answer to the circular given below, stated, or occasionally though briefly gave statistics to prove, that consumption was rife throughout a township, I have examined his answers to the other questions of the Circular, especially those to Nos. 1, 2, 3, 10, 11, 12, 13, 15. I have thus endeavored to decide the chief characteristics of the townships, in regard to the relative amount of moisture or dryness found in each. Similar examinations were made in regard to special localities, or houses in which consumption was said or known to have prevailed. And so on, with all the five classes of townships named in Table II. (p. 77).

The questions in my Circular were as follows:—

Name of Township, and its population.

1. Height above sea level?
2. Distance from sea?
3. Is sea breeze felt there?
4. What winds most troublesome to consumptive patients?
5. What winds—North, East, South or West—most prevalent?
6. Is town liable to sudden changes from heat to cold?
7. Is town liable to sudden changes from dryness to moisture?
8. Is any part of town peculiarly liable to the prevalence of Consumption?
9. If so, what, if any, are the peculiarities of the spot?

* For "A—Memorial," referred to in the Address, see "Obituaries," following the Appendix.

10. What is the atmosphere generally (cool? warm? dry? damp? foggy? &c.)?
11. What is the position of town (exposed? sheltered? warm? cold? &c.)?
12. Annual amount of rain (great? medium? small?)?
13. Annual amount of snow (" " ")?
14. Employments of citizens (farming? fishing? factories? trading? &c.)?
15. Soil (geological structure? rivers? ponds? bay? meadows? marshes? hills? valleys? &c.)?
16. Cultivation (very rich? good? medium? poor?)?
17. Social condition (rich? medium? poor? buildings? &c.)?

FEBRUARY 23, 1858.

Dear Sir,—Above is a copy of the Circular which has been circulated in Massachusetts. You will observe that some of the questions may be answered by simply underscoring certain words. Of course, I should like as much detail as you may be able or willing to give. Monosyllabic (at least) returns to these have been received from every town in Massachusetts, and from a few towns in the neighboring States of Vermont, New Hampshire, Maine and Rhode Island. What I especially want, however, now, are actual statistics of the prevalence of Consumption in the various portions of New England. For this purpose, several persons have given me, from their own knowledge, or from the information of others, the following facts, accompanied at times by a map (rough, perhaps, but very valuable) of the town, representing the districts, and marking their peculiarities of soil and climate generally. The facts I wish for, are as follows:—

Population of town.
Population (at least approximatively) of each district.
Number of deaths by *all* diseases in each district.
Number of deaths by consumption in each district.

Likewise, a brief answer to all the questions that can be readily answered in the above Circular. Respectfully yours,

HENRY I. BOWDITCH.

The following are the names of the various townships and resident correspondents, from whom I have received the data on which the preceding Address is founded. It is due to them that I thus publicly thank them for their extreme courtesy, and valuable information, obtained, at times, by them with much labor.

Abington,	Dr. A. P. Chase	*Barre,*	Dr. J. M. Bates
Acton,	H. Cowdrey, A. H. Cowdrey	*Becket,*	W. O. Bell
Adams,	N. S. Babbitt	*Bedford,*	A. B. Adams
Alford,	M. R. Van Deusen	*Belchertown,*	H. Thomson
Amesbury,	Thos. Sparhawk	*Bellingham,*	L. L. Scammell
Amherst,	B. F. Smith	*Berkley,*	Wm. Dickinson
Andover,		*Berlin,*	
Ashby,	Alfred Hitchcock	*Bernardston,*	John Brooks
Ashburnham,	Alfred Miller	*Beverly,*	Augustus Torrey, Charles Haddock
Ashfield,	C. L. Knowlton	*Billerica,*	Augustus Mason
Ashland,	J. C. Harris	*Blackstone,*	Abel Wilder
Athol,	George Hoyt, George Field	*Blandford,*	Silas P. Wright
Attleboro',	Thaddeus Phelps	*Bolton,*	Dr. W. H. Bigelow
Auburn,	J. E. Hathaway, Daniel Green	*Boston,*	Mr. N. A. Appollonio
Barnstable,	H. E. M'Collum	*Boxboro',*	C. Hartwell, Cowdrey
		Boxford,	W. S. Coggin

Boylston,	Dr. John Andrews
Bradford,	George Cogswell
Braintree,	Noah Torrey
Brewster,	S. H. Gould
Bridgewater,	Calvin B. Pratt A. T. Lowe
Brighton,	I. G. Braman
Brimfield,	A. Lincoln
Brookfield,	J. A. Penniman
Brookline,	Charles Wild
Buckland,	J. Trow
Burlington,	Rev. Samuel Sewall
Byfield,	Dr. Martin Root
Cambridge	M. Wyman
Cambridgeport	W. W. Wellington
Canton,	C. S. Taft
Carlisle,	Austin Marsh
Carver,	H. T. Erland
Charlemont,	M. F. Potter
Charlestown,	A. R. Thompson
Charlton,	C. M. Fay Isaac Porter
Chatham,	E. W. Carpenter
Chelmsford,	N. B. Edwards
Cheshire,	L. L. Cole
Chester,	Mr. E. D. Cooke E. L. Hill H. S. Lucas
Chesterfield,	Dr. A. M. Smith
Chicopee,	P. L. B. Stickney
Chilmark,	R. R. Jones
Clarksburg,	N. S. Babbitt
Clinton,	G. W. Burdett
Cohasset,	Joseph Osgood C. C. Tower
Coleraine,	A. C. Deane
Concord,	H. A. Barrett
Conway,	E. D. Hamilton
Cummington,	Mr. Swain
Dalton,	Dr. Henry Ferre
Dana,	Albert Amsden
Danvers,	Eben Hunt
Dartmouth,	W. B. Mason
Dedham,	J. Stimson
Deerfield,	G. F. Gale
Dennis,	C. M. Hurlbert
Dighton,	Wm. Dickinson
Dorchester,	Edward Jarvis John P. Spooner E. D. Miller
Douglass,	J. E. Sinnell
Dover,	Rev. Ralph Sanger
Dracut,	Dr. Henry Richardson
Dudley,	S. F. Lindsey
Dunstable,	A. P. Pierce
Duxbury,	Mr. Seth Sprague Dr. James Wilde
E. Bridgewater,	Dr. Samuel Orr
E. Cambridge,	Moses Clark
Easthampton,	Atherton Clark
Eastham,	John Phillips
Easton,	John H. Gushee Caleb Swan
Edgarton,	J. H. Lucas
Egremont,	J. M. Bassett
Enfield,	E. H. Rockwood J. W. Winslo[illegible]
Erving,	Edward Bart[illegible]
Essex,	Josiah Lamson
Fairhaven,	George Atwood Paul Spooner
Fall River,	R. T. Davis
Falmouth,	Aaron Cornish
Fitchburg,	T. R. Boutelle L. Pillsbury
Florida,	N. S. Babbitt
Foxboro',	J. G. S. Hitchcock
Framingham,	S. Whitney
Franklin,	L. L. Scammell
Freetown,	Thos. G. Nichols
Gardner,	J. H. Greenwood
Georgetown,	George Moody
Gill,	J. Lyons
Gloucester,	H. E. Davidson J. F. Dyer
Goshen,	Daniel Pierce
Grafton,	D. Pierce
Granby,	C. N. Chamberlain
Granville,	Vincent Holcomb
Grt. Barrington,	N. B. Pickett
Greenfield,	James Deane
Greenwich,	C. E. Davis
Groton,	Joshua Green
Groveland,	Jeremiah Spofford
Hadley,	Franklin Bonney
Halifax,	Edwin Inglee
Hamilton,	D. S. Allen
Hancock,	Frank A. Cady
Hanover,	B. Whitwell
Hanson,	Bowen Barker
Hardwick,	Almon M. Orcutt J. P. Lynde
Harwich,	Franklin Dodge
Harvard,	E. A. Holman
Hatfield,	T. S. Knight
Haverhill,	Kendall Flint
Hawley,	Henry Seymour
Heath,	Cyrus Temple
Hingham,	R. T. P. Fiske
Hinsdale,	B. F. Kittredge
Holden,	A. D. Smith
Holland,	David B. Dean
Holliston,	E. G. Plympton
Hopkinton,	J. Pratt

Holyoke,	Dr. A. B. Clark	*New Ashford,*	Leland White
Hubbardston,	Moses Phelps	*Newbury,*	Dr. Martin Root
Hull,	Mr. Samuel Loring	*Newburyport,*	H. C. Perkins
Ipswich,	Dr. C. H. Brown	*New Bedford,*	W. A. Gordon, Lyman Bartlett
Kingston,	P. L. Nichols		
Lakeville,	Isaac Sampson	*New Braintree,*	A. A. Kendall
Lancaster,	J. L. S. Thompson	*New Marlboro',*	J. P. Perkins
Lanesboro',	Mr. G. R. Rockwell	*New Salem,*	Robert Andrews
Lawrence,	Dr. Seneca Sargent	*Newton Centre,*	W. H. Thayer
L[illegible]	Coridon Guiteau	*Newton U. Falls*	Edward Warren
Leicester,	Edward Flint	*Northampton*	E. E. Denniston
Lenox,	M. Sabin	*N. Bridgewater,*	Horatio Bryant, A. K. Borden
Leominster,	C. C. Field		
Leverett,	David Pierce	*N. Brookfield,*	J. Porter, Jr.
Lexington,	Howland Holmes	*Northboro',*	Joseph Allen, C. W. Barnes
Leyden,	E. Haynes		
Lincoln,	H. C. Chapin	*Northbridge,*	R. R. Clarke
Littleton,	J. G. Eliot	*Northfield,*	Elijah Stratton
Longmeadow,	George Hooker	*Norton,*	W. Dickinson
Lowell,	J. C. Dalton	*Norwich,*	T. K. De Wolf
Ludlow,	W. B. Alden	*Oakham,*	S. P. Martin
Lunenburg,	D. Manning	*Orange,*	Ed. Barton
Lynn,	James M. Nye	*Orleans,*	Benj. F. Seabury
Lynnfield,	John Perkins, Jr.	*Otis,*	M. Webb
Malden,	Nathan French	*Oxford,*	Jonathan Nichols
Manchester,	L. B. Farrar	*Palmer,*	Jason B. Thomas
Mansfield,	W. F. Perry	*Pawtucket,*	B. Carpenter
Marblehead,	C. Blaisdell	*Paxton,*	E. M. Wheeler
Marion,	W. N. Ellis	*Pelham,*	A. G. Craig
Marlboro',	E. H. Barnes	*Pembroke,*	Francis Collamore
Marshfield,	Henry Blanchard	*Pepperell,*	N. Cutter, Chas. E. Parker
Marshpee,	Mr. Chas. Marston		
Mason,	Dr. W. N. Ellis	*Peru,*	Frank. A. Cady
Medfield,	John S. Galloup	*Petersham,*	Sam'l Taylor
Medford,	C. V. Bemis, Milton Fuller	*Phillipston,*	Jason Goulding
		Pittsfield,	Frank. A. Cady
Medway,	S. Salisbury, Ira Perry	*Plainfield,*	Sam'l Shaw
		Plymouth,	Le Baron Russell
Melrose,	Moses Parker	*Plympton,*	J. T. Hammond
Mendon,	J. G. Metcalf	*Prescott,*	Daniel Lowell
Methuen,	J. M. Grosvenor	*Princeton,*	W. N. Boylston
Middleboro',	J. Perkins	*Provincetown,*	John L. Lothrop
Middlefield,	S. F. Root	*Quincy,*	Eben'r Woodward
Middleton,	E. S. Phelps	*Randolph,*	Eben'r Alden
Milford,	Francis Leland	*Randolph, E.*	T. E. Wood
Millbury,	Henry G. Davis	*Raynham,*	Elisha Hayward
Milton,	Jonathan Ware	*Reading,*	H. P. Wakefield
Monson,	Alvan Smith	*Reading, N.*	" "
Montague,	David Bradford	*Reading, S.*	J. D. Mansfield
Monterey,	Alvan H. Turner	*Rehoboth,*	M. R. Randall
Montgomery,	S. Shurtleff	*Richmond,*	
Mt. Washington	H. W. Lamson	*Rochester,*	Joseph Haskell, W. E Sparrow
Munroe,	H. Gould, of Rowe		
Nantucket,	E. P. Fearing	*Rockport,*	Benj. Haskell
Natick,	Ira Russell	*Rowe,*	Humphrey Gould
Needham,	Edward Warren	*Rowley,*	Richard Herbert

Roxbury,	Dr. B. E. Cotting
Royalston,	Isaac P. Willis
Russell,	S. Shurtleff
Rutland,	B. H. Tripp
Salem,	G. Choate
Salisbury,	Benj. Sawyer
Sandisfield,	Erastus Beach
Sandwich,	John Bachelder, Henry Russell
Saugus,	Sam'l Hawks
Savoy,	A. M. Bowker
Scituate,	Francis Thomas
" *S.*	Rev. Caleb Stetson
Seekonk,	Dr. Johnson Gardner
Sharon,	A. D. Bacon
Sheffield,	Oliver Peck
Shelburne,	Chas. M. Duncan
Sherborn,	A. C. Blanchard
Shirley,	James O. Parker
Shrewsbury,	Adolph. Brigham
Shutesbury,	Lewis S. Bemis
Somerset,	John B. Chase
Somerville,	Luther V. Bell
Southampton,	Artemas Bell
Southboro,'	Mr. Joseph Burnett
Southbridge,	Dr. S. C. Hartwell
South Hadley,	Ed. G. Ufford
Southwick,	J. W. Rockwell
Spencer,	Jonas Guilford
Springfield,	Alfred Lambert
Sterling,	Thos. H. Gage
Stockbridge,	Mr. E. H. Owen
Stoneham,	Dr. W. F. Stevens
Stoughton,	Simeon Tucker, J. B. Walker
Stowe,	Hermon Chandler
Sturbridge,	Calvin P. Fiske
Sudbury,	L. Goodenough
Sunderland,	Nath'l G. Trow
Sutton,	William Terry
Swansea	J. L. Wellington
Taunton,	Wm. Dickinson
Templeton,	J. W. D. Osgood
Tewksbury,	Jonathan Brown
Tisbury,	R. K. Jones
Tolland,	F. D. Austin
Topsfield,	R. A. Merriam
Townsend,	E. Leigh
Truro,	J. H. Davis
Tyngsboro',	Aug. F. Pierce
Tyringham,	Alvan H. Turner
Upton,	Dr. H. Carpenter
Uxbridge,	Jas. W. Robbins
Wales,	Jno. Smith
Walpole,	Eben. Stone
Waltham,	H. Adams
Ware,	E. C. Richardson
Wareham,	P. F. Doggett
Warren,	Nelson Carpenter
Warwick,	Amos Taylor
Washington,	
Watertown,	Hiram Hosmer
Wayland,	Jacob Ulman
Webster,	Charles Negus
Wellfleet,	Solomon A. Rich
Wendell,	L. Cooke
Wenham,	Nathan Jones
Westboro',	Benj. Pond
West Boylston,	Ephraim Lovell
W. Bridgewater,	Daniel Chaplin
W. Brookfield,	Wm. Curtis
W. Cambridge	Jos. Underwood
W. Stockbridge,	R. H. Comstock
Westfield,	J. Abbott
Westford,	Benj. Osgood
Westhampton,	H. H. Orcutt
Westminster,	Wm. L. Lincoln
W. Newbury,	John Appleton
Weston,	Otis E. Hunt
Westport,	B. B. Sisson
W. Roxbury,	Geo. Faulkner
W. Springfield,	Reuben Champion
Weymouth, N.	Noah Fifield
Whately,	Myron Harwood, C. Bardwell, 2d
Wilbraham,	Jesse W. Price
Williamsburg,	T. Meekins, Washington Shaw
Williamstown,	Henry L. Sabin, S. Duncan
Wilmington,	B. Cutter
Winchendon,	Alvah Godding
Winchester,	A. Chapin
Windsor,	W. Richards
Winthrop,	P. M. Crane
Woburn,	Aug. Plympton, B. Cutter
Worcester,	Wm. Workman
Worthington,	A. M. Smith
Wrentham,	D. L. Gibbens
Yarmouth,	George Shove

Correspondents in Maine.

Bethel,	Dr. John Grover
Dixmont,	A. Johnson
Kennebunk,	—— Trafton
Saccarappa,	Dr. Wm. Marrett
Saco,	J. L. Allen

Correspondents in New Hampshire.

Atkinson,	Dr. Isaac B. Hovey	*Farmington,*	Dr. C. L. Hartwell
Hampton,	C. H. Sanborn		Charles Tuttle
Hampton Falls,	" "	*Greenland,*	G. C. Clough
Newport,	S. E. Richardson		

Correspondents in Rhode Island.

Bristol and Warren, Drs. J. James Ellis and Charles W. Parsons.

D.

The following are the facts referred to in the Address. Dr. Ira Perry says: "Black Swamp is blamed for fevers, consumption, &c. In it, water is stagnant, in some parts most of the year. People around, however, live to a good old age. There is one spot on which there are three houses (the only ones except one new one), where, within twenty-five years, fourteen persons have died of consumption, confined to four families, a quarter of a mile apart. This spot is low, springy land on the north, and Charles River on the south, close by. The north-east winds drive directly over this swamp upon the houses."

In a subsequent letter, Dr. P. suggests, that perhaps the hereditary nature of the disease may have had effect.

Dr. Garratt, formerly of Hanover, now of Boston, informs me of a house in Pembroke, in which, he thought, before he knew of my views, that consumption commenced in a family, having no tendency to phthisis, in consequence of the presence of moisture and coldness. It is situated on a hill, and exposed to the full force of north and east winds from over the Marshfield flats, and through a valley, overflowed each spring and autumn. These winds, of course, come laden with moisture. But besides this, the house had behind it, and close upon it, a pool of water, about twenty feet square, into which all the refuse of the house and barn was conveyed, thus forming a festering mass of corruption, in addition to the moisture. Effluvia from this continually filled the house. Two of the children died of phthisis, and a third began to falter. The patient was removed from the spot, and the pool dried up at the earnest solicitation of Dr. G. After removal from the place, the family improved in health. Some may deem the filth more prominent, as a cause of the disease in this instance, than the moisture of the soil. Dr. G., however, who saw the place, believed that the constantly wet soil, immediately adjacent to the house, was the chief cause.

Dr. Brown, of Tewksbury, says the house where most cases of consumption have occurred, is "an old, ill-repaired and dilapidated house, standing about fifty rods from Shawshan River, on rather moist land, and in the shade of a very large willow tree."

Dr. Bartlett, of New Bedford (page 96), mentions a family in a town in the western part of the State, in which both parents and four out of five children died of consumption. This house is terribly situated, if we have any belief in the effect of moisture in producing consumption. Without this belief, we should say it was a pleasant summer residence. A mill-pond is directly behind it. It is in the depth of a mountain valley, and covered wholly from the sun by lofty and large outspreading shade trees. Heavy fogs rest often on this dwelling when the adjacent hills are free.

Dr. Bartlett also thinks that "nearly every one of both families died of consumption in two houses very near the last-named, and similarly bathed with moisture and covered with shade trees."

F.

Dr. Alden s statistics (p. 120), so far as they bear upon our immediate question, are as follows: —

Under date of February 17, 1854—out of 70 undoubted cases of well-known tubercular consumption, from 1820 to 1845, and excluding all either of a doubtful character or of which he says he has "no personal knowledge," and all being in American families—

18 occupied elevated situations.
39 " medium "
13 " low "

Subsequently I wrote to ask more particularly about the influence of moisture, it being evident that mere relative height does not show anything, in reality, about the amount of *moisture* of the soil in that same part. His answer is as follows:—

"In reply to your inquiry whether moisture or a residence near swamps or springy soil, or rivers or ponds, have been at all connected with the reported deaths, I answer "No," so far as my inquiries have extended. To enable you to appreciate the value of this answer, it will be necessary for me to say that the Blue Hill ridge is situated north of us, running in an easterly direction from the north-west corner of Randolph. Immediately south of this ridge is a chain of ponds, beginning westerly. (Dr. A. names six.) From these, there is a gentle ascent southerly, until, at a distance of from three to six miles, the height is reached which divides Massachusetts from Narragansett Bay. On this slope Randolph is situated, divided into East and West Randolph by a valley, running north and south, fifty feet or more lower than the grounds east and west, through which a small stream runs, originating in the swamps and meadows near the height of land, and receiving accessions from the ponds. * * The two principal streets of the town run parallel with the river, and at an average distance of one mile from it, and the great body of the inhabitants occupy sites, comparatively elevated. With these explanations, you will readily understand how it happened that, of the reported cases of phthisis, only thirteen had their residence near swamps or in damp situations."

It is evident, as remarked in the Address, that until we know the relative population on the parts alluded to, we cannot decide the question of the greater or less prevalence of consumption in them.

Dr. A. concludes his letter by saying, that his opinion is that the coldness and moisture of the low parts would "be adapted to work mischief on the organs of respiration, and if the population of such districts were equally dense with those which are more elevated, I have no doubt such a result would be apparent."

Dr. Cotting's arguments against the views taken in the Address (page 120), are contained in an elaborately prepared discourse, delivered before the Norfolk District Medical Society.* It is an answer to a circular, similar to my own, sent to the members by the Secretary, Dr. Jarvis. In order to show exactly what Dr. C.'s opinions are, I quote the following :—

III. — *Is it* [*Consumption*] *more prevalent along Water-Courses or near to Mill-Ponds that are alternately raised and drained off?*

We have been at some considerable pains-taking to mark, on a plan of the city, the localities of the deaths from consumption for the last four years; and have thus with tolerable accuracy indicated as many as could be ascertained, or 208 out of 257, the whole number.

By reference to this plan, it appears that along the only fresh-water *mill-pond* (that near Lowell Street), which is alternately raised and drained off, and where is often left exposed a large muddy surface, and on whose margins, with those of its inlet, are the principal low grounds bordering on fresh water, there have been but *three* deaths from consumption during the past four years; and these, so far as can be ascertained, originating clearly from causes not connected with the locality. Along the ridge of land between the full and empty basins of salt water of the "Boston Mill Company," in that part within the limits of Roxbury, but *two* deaths from consumption have been recorded during the same time.

IV. — *Has any Effect been observed of any other kind of Locality?*

On the borders of the marsh land, and the ridges immediately adjoining, there have been many deaths; but in these localities the population is most dense and of the most destitute classes. And even here the native population and the best and most comfortably housed of the foreigners seem to be as exempt from consumption as in other localities.

In such neighborhoods, from the comparative cheapness of land, the new emigrants erect their miserable tenements, and fill them to overflowing with such as either desire or are able to procure no better abodes. Crowded apartments (sometimes ten or a dozen persons, frequently half that number occupying for all purposes a room, say fifteen feet square); filthiness to an incredible degree in person and raiment; coarse and ill-cooked food, eaten in ravenous haste; intolerably oppressive and offensive atmospheres; excessive use of tobacco, and perhaps other bad habits; all these are prevalent among the denizens of such places, and are in a common-sense view of

* Statistics of Consumption in Roxbury. Read before the Norfolk District Medical Society of Massachusetts, at the Annual Meeting, May 17, 1851. By B. E. Cotting, M.D. Printed by vote of the Society.

the matter as likely to be productive of disease, even the disease in question, as the resting of their habitations on low and damp foundations.*

This view seems to be sustained in the following tables, constructed for the purpose of throwing some light on these points.

Descent of those dead from all Diseases.

Year.	Roxbury born.	Other Americans.	Foreign Immigrants.	Total.
1850—51	145	93	95	333
1851—52	139	115	121	375
1852—53	118	96	83	297
1853—54	161	96	91	348

Descent of those dead from Consumption.

Year.	Roxbury born.	Other Americans.	Foreign Immigrants.	Total.
1850—51	11	21	27	59
1851—52	12	29	34	73
1852—53	10	25	37	74
1853—54	6	21	24	51

According to the State Census, taken in 1850, the proportion of Americans to foreigners and children of foreign parents, in the five lower wards, now constituting the city of Roxbury, was as follows:

	Americans.	Children of Foreign Parents.	Foreigners.	Total.
	8347	1921	4882	15150

---

* Since the above went to press, through the kindness of Drs. Harris and Weld, of Jamaica Plain, I have been furnished with a transcript from the Church Records of sixty-seven cases of death from consumption, which occurred in that Parish (embracing the middle third part of the area of the original city of Roxbury), from Feb. 7, 1793, to Jan. 7, 1847—a period of fifty-four years. These cases I have carefully examined and classed as follows.

Deaths from Consumption at Jamaica Plain, from 1793 to 1847.

High and dry Ground.	High near Low Ground.	Low Ground.	Salt Marsh.	Came in last Stages.	Location not known.	Total.
26	12	4	1	10	14	67

Of these cases, 26 occurred on high and dry ground; 12 on high land, within an eighth or a quarter of a mile of a meadow, brook or pond; 4 on low grounds; 1 near a narrow strip of salt marsh which touches the parish at one of its corners; 10 came into the place in the last stages of the disease; and the locations of 14 are not stated, and are not now known. Ten of the dead are spoken of in the records, as having been of consumptive families; of which 4 were on high ground, 2 near low, 2 on low, and 2 on locations not stated.

[In not stating the number of the inhabitants or the total number of deaths in each district, these statistics prove really nothing for or against the doctrines of the Address.—H. I. B.]

Thus it is evident that while the proportion of immigrant foreigners to Americans and the children born here of foreign parents, is as 48 to 102, or less than one third, and while the deaths from all causes to the immigrants amount to only one in three or four of the whole number; nearly, and in some instances, quite half of all the deaths from consumption occur amongst the immigrants.

Furthermore, it may be seen by the following table, that the number of those who died from consumption, and who were known to have dwelt on low, wet, or made lands, where many of the immigrant population reside, amount to 78 out of 257, or a little less than one third—while those who died of consumption on high and dry lands, amount to 170, or two thirds of the whole number.

Localities of the Deaths from Consumption.

Year.	High.	Low.	Not known.	Total.
1850—51	33	11	15	59
1851—52	31	25	17	73
1852—53	42	23	9	74
1853—54	24	19	8	51
1850—1854	170	78	49	257

Dr. Cotting closes his Address in the following words:

"We are aware that to draw general conclusions from observations over limited portions of space and time, as well as from other partial premises, is a very common error. We shall therefore only venture to express the opinion that the causes of consumption are infinitely various, that the disease may arise wherever any vice exists in the individual system, originating from ancestry, external circumstances, or internal derangements—from any cause, in short, which depresses the system below a natural, healthy or normal standard, despite of, or in conjunction with, the influences emanating from the locality. The peculiar condition of the soil beneath, or the air above, the prevalence of vapors, or the absence of them, may seem at one time greatly to influence the disease; but in another and different period they appear to have no effect whatever upon it. No place which is now exempt, or for a few years past has been comparatively free from this disease, can boast of its exemption with any certainty that the boast, even as it passes the lips, may not prove empty and in vain.

"In the present state of our knowledge, consumption appears to be a method designed to remove those whose mortal bodies have, from whatever cause, fallen below the normal condition: and, as such, however much it may be ameliorated, is not likely ever to be extinguished while the same nature is continued to the human race."

In the Address, I have made the remarks I deemed necessary on the views held by Dr. Cotting. I have felt it to be my duty to present all the facts I could obtain, in opposition to my views on this very important question in the Etiology of consumption in Massachusetts.

Upon this conclusion, to which Dr. Cotting arrives, I would simply remark that such a belief as this, if applied generally in the investigation of all diseases, would forever check improvement in medical art—all hopes of ever relieving poor human nature of any of the various ills

to which it is liable. Dr. Cotting would undoubtedly shrink from such a conclusion. But what right, *a priori*, has Dr. Cotting to say that consumption is selected, *par excellence*, as the favorite means used by Almighty Power for sweeping off the refuse of mankind, and is therefore to last forever? The fact that, heretofore, its causes and modes of prevention or of cure have been difficult to be understood by us, is no proof that they always will be so. Such a view seems to me only the time-honored objection of ultra conservatism, in its opposition, not only to progress itself, but even to the bare mention of it.

Since this report was first presented to the Massachusetts Medical Society, the very valuable volume, containing the Army Returns,* has given us details which sustain the position I have arrived at, although, by themselves, the law of development of phthisis I am contending for, could not have been ascertained.

In support of these assertions, I quote the following extracts from Dr. Coolidge's remarks, page 497.

"*First.* Temperature, considered by itself, does not exert that marked controlling influence on the development or progress of phthisis, which has been attributed to it. If a high range of temperature were favorable to the consumptive, the South Atlantic Region, the South Interior, East and Gulf Coast of Florida, should exhibit a lower ratio than the colder regions of the North and Northwest, whereas the contrary obtains; and again, if a high range of temperature were the controlling element in causing an increased ratio of this disease in the low southern regions above-named, we ought *not* to find a lower proportion of cases in Texas, where the temperature is higher, nor in the South Interior West, where it is nearly the same as in the South Atlantic Region.

"*Second.* The most important atmospherical condition for a consumptive is *dryness*. An examination of the rain tables will serve in *part* to elucidate this position, and in *part* only, for the total annual precipitation in rain and snow may be equal in two or more places, and yet the average condition of the air as respects moisture—the dew-point—may widely differ. It is impossible to represent all these differences by statistical tables, but the fact has been forcibly impressed upon the compiler during the minute examinations necessary to the preparation of this report.

"*Third.* Next to dryness, in importance, is an equable temperature, a temperature uniform for long periods, and not disturbed by sudden or frequent changes. A uniformly *low* temperature is much to be preferred to a uniformly *high* temperature. The former exerts a tonic and stimulating effect upon the general system, while the latter produces general debility and nervous exhaustion. The worst possible climate for a consumptive is one of long-continued high temperature and high dew-point."

Dr. Coolidge likewise gives the annexed table, with the following remarks:—

"With the exception of West Point (young men), the lowest rate of consumption occurs in New Mexico, and the highest in the South Atlantic Region. The South Interior East and the Gulf coast of Florida give the next highest proportion. The ratios for these regions, and also those for California, are higher than for any of the regions in the northern division."

* Statistical Report, &c., *ut supra*.

	Regions.	Mean Strength.	No. treated.	Deaths.	Ratio of cases to 1000 of Mean Str'gth.
1	Coast of New England	3,963	19	5	4.8
2	New York Harbor	9,387	56	35	5.9
3	West Point	6,901	6	8	.8
4	North Interior East	3,553	17	10	4.7
5	The Great Lakes	10,346	47	33	4.5
6	North Interior West	7,230	30	15	4.1
7	Middle Atlantic	6,299	16	14	2.5
8	Middle Interior East	2,456	6	3	2.4
9	Newport Barracks, Ky	1,454	5	4	3 4
10	Jefferson and St. Louis	5,580	23	21	4.1
11	Middle Interior West	5,319	28	13	5.2
12	South Atlantic	2,800	26	5	9.2
13	South Interior East	5,919	43	28	7.2
14	South Interior West	10,013	20	25	2.
15	Atlantic Coast, Florida	835	2	1	2.3
16	Gulf Coast, "	2,299	16	3	6.9
17	Texas, South Frontier	4,450	18	11	4.
18	Texas, Western "	6,324	25	12	3.9
19	New Mexico	5,873	8	3	1.3
20	California, Southern	1,707	9	5	5.2
21	California, Northern	1,599	9	4	5.6
22	Oregon, Washington	1,831	6	2	3.2

Dr. Coolidge remarks that the land east and from the base of the Rocky Mountains, and west of the Great Lakes, is favorable for consumptives.

Again, examination of the several regions shows, in a "marked degree, the effect of long-continued high temperature combined with excessive moisture (high dew-point) in the production and development of consumption." (Page 338.)

Since delivering the Address, I have received the following letters from two respected members of the Society. It will be seen that they hold exactly opposite views of the question in debate—one opposing it by special facts and general statements, the other sustaining it by statistics.

GROVELAND, May 30, 1862.

Dear Sir,—I am not certain whether I have made any response to your Circulars on the subject of consumption, as I should have done; but presuming that you are glad of facts at any time, I sit down to give you a series of such as have come under my observation, during a practice of forty-eight years.

My circle of practice is over as great a diversity of soil and elevation as can probably be found, within the same extent of land, in the State. High hills, sandy plains, a tide-water river, quick streams, a clear pond of three hundred acres, and a boggy pond and wide meadows. It would give me great pleasure to conduct you over the town, and have you locate the spots for consumption. It does appear to me that you would find it difficult to apply your theory to the facts, as they have arisen under my observation.

I have never supposed the vicinity of a clear running stream unhealthy, and I have seen nothing to shake that belief. I live twenty-five rods from the Merrimack, and thirty feet above it. I have brought up eight children;

none consumptive. ——— was an invalid when married, forty-eight years ago, and has lived here forty-five years. She has *adhesions* from pleurisy, but is about her cares now, aged seventy-two! We have now 1,400 inhabitants in town, perhaps 1,100 on an average all the time (orty-four years), with about twenty deaths a year, and, as near as I can calculate, not much over one a year by consumption. On a street directly on the river bank, of about 200 inhabitants, we have now, I believe, 17 past 70 years of age, and one over 90.

On a mill-stream, which passes a mile from the great pond to the river, in eleven of the newest houses, there has been one case of consumption.

On a dry knoll, half a mile from the river, and forty feet above a clear running stream, a young man, aged 22, with long-lived ancestry, lately died of consumption.

Along the river bank, thirty years ago, three young people, a brother and two sisters, died of consumption; the parents now living—near 80, and other children healthy.

On a high, dry spot, a mile from the river, a lady, aged 75, lately died of consumption; near by, her husband's parents lived to about 90. Her husband lived to be 75, but died of *rum*.

On a low spot, by the side of a brook and meadow, D. H. lived to 91; daughter on the spot, now 70; brother died about 75.

On a high, dry, sandy soil, fifty rods from the mill-stream, and sixty feet above it, P. C., aged 60, and two sons, 16 to 20, died with consumption.

On a dry plain, near a mile from the river, E. R. died of consumption, aged about 60; wife living now, aged 92; children healthy. A few rods distant, on as dry a spot, H. N., a girl of 12, died of consumption.

On a low spot, near the level of a meadow, but the house on a dry spot, B. H. and wife now live, near 80.

On a dry spot, but near a swamp and often stagnant water, Rev. W. B. lived to be 92; his son to about 80; his grandson, now living, 96; his mother was over 90; the families that grew up, and went out from the spot, healthy and long lived.

A house near this, and nearer to the meadow, has had but one death by consumption in the two families which have resided there, in forty-five years. A girl born there died, ten or twelve years old, with consumption, consequent upon whooping cough and measles; the mother died with consumption, after removing for twenty years to a much higher and drier spot.

On a dry spot, but near a meadow and mill-stream, M. P., Esq., and wife, near sixty years ago, buried three children, 12 to 20 years old, with consumption. He lived to be 80, and the wife to be 90, and no more consumption in the family through two generations born and brought up there.

In a high and dry neighborhood, well known for its health, and beautiful location, S. S., a fine girl of 20, died of consumption twenty-five years ago; her mother, aged 75, died of consumption. Lately a nephew to the first named, brought up there, and residing there except when at Amherst College and Andover Institution, died of consumption; all of which places, of birth and residence, might have been selected for their beautiful and healthy location. A sister of the first named, married 30 years ago, and living in the worst locality in this town, on account of its contiguous meadow, a tan-yard, and being liable to the filtration of a cemetery 30 rods off, on much higher ground, is living, aged 60, though probably tuberculous.

Dr. P., half a mile from the river, and 100 feet above it, lost his second son at 18, by consumption. His eldest son, the late Dr. W. T. P———, of S—— B——, died at Jamaica Plain, of consumption. The Doctor, sen., died in 1845, aged 87; his wife, about 1850, aged 65, with consumption.

Some have accused the river of producing fevers, but I do not find ground for the charge. I think as many die in Georgetown, my native place, directly back of this town, as here.

I have no doubt that stagnant water, with decaying vegetables, is unhealthy; but running streams, or ponds with clean shores, I think not.

On our river road, two and a half miles, with nearly 600 people, I can make out but 20 cases of tubercular consumption. I omit cases of decay at 70, 80 and 90 years, unless with distinct lung disease; also cases of dropsy and intemperance. Within the same limits I can name 47 persons now living, or who died, over 80, and 4 over 90.

We have very few fogs on the Merrimack. I have resided on the Connecticut River, and should think there are ten foggy mornings there to one here. We have five or six feet flow of tide, but it is by the backing up of the river current. We never have salt water within four or five miles of this place.

Consumption is often hereditary, and marches on with steady tread to take its victims; nor does locality seem to have much to do with it. Your late patient, H—— N——, of G———, was an instance. His grandfather and grandmother died of consumption; his mother, an uncle, and, I think, three aunts, died of consumption; his own sister, and a half sister by the mother, dittò, under my care. Two own cousins, viz., the late C—— A——, Esq., of B———, and a brother in Minnesota, both lately died of consumption, aged 26 and 28. These were all my relations and friends.

With the highest respect for your medical and scientific ability, I must think that my experience would not fully sustain your views.

JEREMIAH SPOFFORD.

I thank Dr. Spofford for his early and earnest reply to the Address. The statement of his long experience is valuable. Yet it does not, of course, induce me to reject the results I have drawn from a wide correspondence with his and my colleagues, in all quarters of the State. I have never claimed that locality is the *sole* cause of consumption. The hereditary nature of the complaint, in many cases, cannot be denied. I have explicitly stated, in the Address, that I do not *know* of any spot in New England in which consumption has been proved not to exist. All these admissions, and they are all that the letter requires, are consistent with the belief that a house situated on a damp soil is, in any part of New England, generally from that fact, much more liable to have consumption prevail in it, than if it were situated on a drier place; and that in some way, to us unknown, the location and consumption stand in the relation of cause and effect. It would gratify me very much, if Dr. Spofford would give the exact amount of deaths by consumption, and by all diseases, and the population, in various distinctly different regions of his town, as marked by different degrees of moisture of the soil, so that they might be exactly compared in reference to this question. Perhaps he would be led, by such data, to different conclusions from those advanced in his letter, and become convinced, as Dr. Hovey of Atkinson and others have been, in spite of their previous and decided *general impressions*.*

* See Address, pages 67, 105.

The second letter, as follows, from Dr. Appleton, sustains the views of the Address—giving, in fact, nearly three times as many cases, in proportion to the population, in the wet districts as the dry. It will be remembered that Dr. Appleton gave, formerly, statistics from West Newbury.* Those given in his present letter fully sustain his previous statements.

BOSTON, JUNE 6, 1862.

My Dear Sir,—In the prosecution of your researches into the prevalence of consumption in Massachusetts, as affected by the humidity or dryness of different localities, you may be interested in the results afforded by the registry of deaths in West Newbury, for the last seven years, which corroborate and strengthen the conclusions, derived from the statistics of the ten preceding years, which are already in your possession.

The population of the town has not varied greatly since the last census, but has rather diminished within the last year, in consequence of the general depression of business occasioned by the war.

The whole number of deaths in the town for the seven years, from 1855 to 1861, inclusive, is 242; of which 59 are registered as from consumption. A reference to the map of the town, which was prepared to illustrate the statistics of deaths from 1845 to 1855, and in which the boundaries of the school districts are described, will show the great proportion of cases in the three northern, or what may be classed as the moist districts.

The deaths from consumption in West Newbury, from 1855 to 1861, were as follows:

In District No. 1,	8	In District No. 4,	3
2,	17	5,	3
3,	27	6,	1
			59

In the three northern (moister, river) districts, 52 in 1271 population, or 1 in every 24.42 persons.

In the three southern (drier, warmer) districts, 7 in 475, or 1 in every 67.85 persons.

It is possible that some of the deaths, which are registered as from consumption, may have taken place from other causes; but I think that this will not affect the general result in regard to the proportion of deaths in each district.

I will now call your attention to a single locality in the western part of district No. 2, a plan of which I have attempted to represent in the accompanying sketch. "Main Street," in West Newbury, is built upon an elevated ridge, nearly parallel with the Merrimack River, at a distance generally of more than half a mile from the stream, and, at this point, elevated at least 150 feet above the level. The soil is a clayey loam, with a subsoil of clay, retaining the moisture, the cellars of the houses which have been excavated here, generally containing water in the winter and spring. With the exception of the house marked A on the plan, which was built about sixty years since, all the tenements represented north of this street have been erected within ten years, "Prospect Street" having been laid out in 1853. The ground, over which this street is located, falls rapidly towards the north, and towards a tract of moist land which must retain much of the surface drainage of the more elevated portion. (See plan.)

* See Table IV. in Address; also note to the same.

In five of the houses, represented on the plan, and designated as B, C, D, E and F, seven of the seventeen deaths, which occurred in the district from consumption, took place between 1855 and 1861. Two persons died in each of the houses B and C, and one each in D, E and F. There are also at the present time, in D, two members of the family who exhibit unequivocal symptoms of phthisis.

I have not the requisite data at hand to enable me to give the percentage of deaths to the population of the several districts.

Hoping that the facts I have communicated will be of sufficient interest to justify the prolixity of the letter,

I remain, very truly yours,

J. APPLETON.

Dr. Bowditch.

ERRATA.

In Table IV., the statistics for Townsend should have been more definitely arranged, as follows :

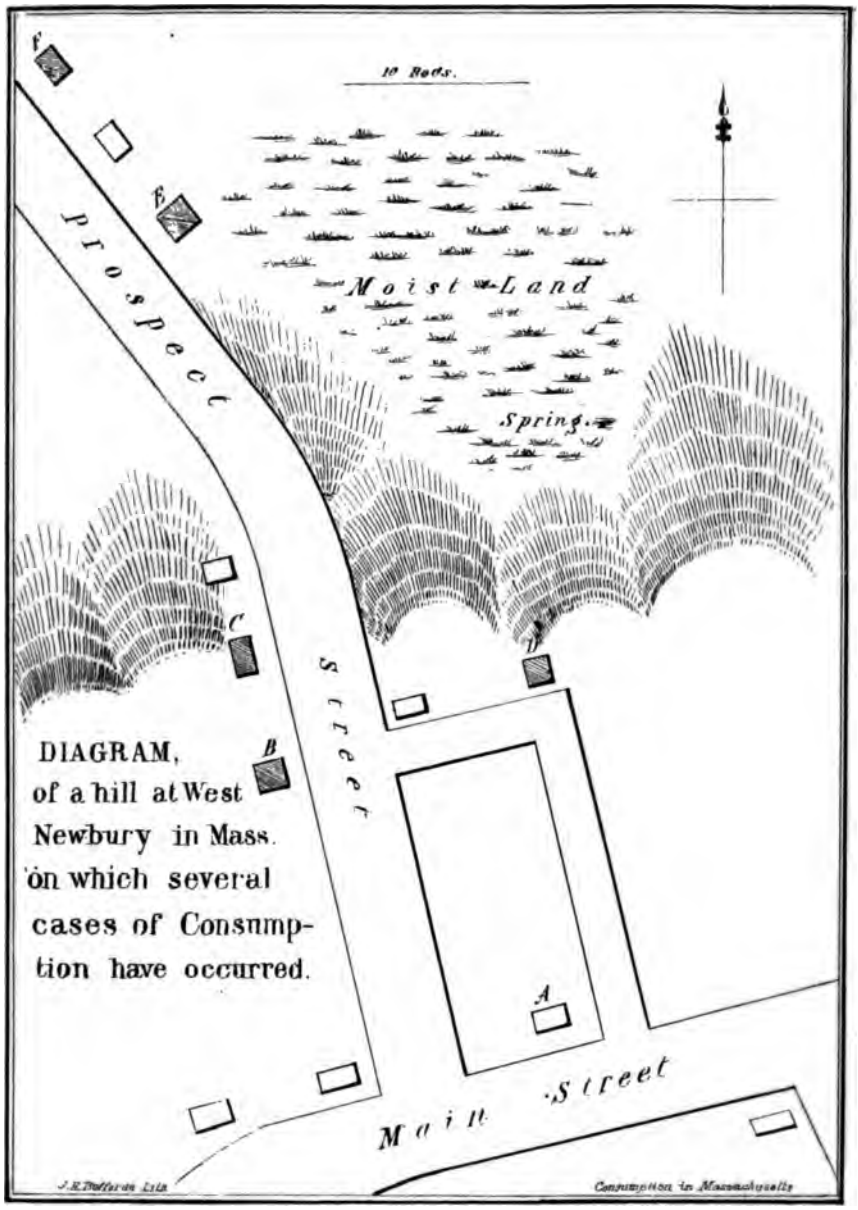
In Dry Localities.	In Localities of medium Moisture.	In clayey Subsoil, retaining Moisture.	In Low and Damp Places.
16.36	19.11	25.85	30.85

On page 75, second paragraph, "in *three* instances" should have been in *a few* instances.

In third paragraph, "twenty-one" should be twenty.

In fourth paragraph, "a little *more* than one third" should be a little *less*, &c.

In quoting Dr. Cotting's tables, and in my remarks thereupon (pp. 120-1 Address—148 Appendix), I did not deem it necessary to verify the tables; but a friend draws my attention to a serious arithmetical error in the adding of the first column in Dr. Cotting's "Table of the Locality of Deaths by Consumption." In that table, the total of deaths by consumption in the "high" places for four years is given as 170; whereas it should have been 130. Therefore, in his prefatory remarks upon this table, Dr. Cotting, instead of claiming that "those who died of consumption on high and dry lands, amount to 170, or two thirds of the whole number," should have stated 130, or a little more than one half of the whole number (257). This, it will be perceived, makes a vast difference, and evidently tends not in the least to disprove, but rather to sustain, the doctrines of the Address, and my own special remarks on this part of Dr. Cotting's paper. For certainly, Dr. Cotting cannot claim that any near approximation to *one half*, or even one third of the population of Roxbury reside on "the low, wet or made lands."


10 Rods.
Prospect
Moist Land
Spring.
Street
Main Street
DIAGRAM,
of a hill at West
Newbury in Mass.
on which several
cases of Consump-
tion have occurred.
A
B
C
D
E
F
J.R. Buffum Lith
Consumption in Massachusetts

LIST OF DECEASED MEMBERS.

Admitted.	Names.	Residence.	Date of Decease.		Age.
1846	JOHN BURROUGHS ALLEY	Boston	April 29,	1862	41
1819	EBENEZER AMES.....	Amesbury	Aug. 29,	1861	73
1835	BENJAMIN ATKINSON....	Amesbury.....	Oct. 24,	1861	55
1837	LUTHER V. BELL.....	Charlestown...	Feb. 11,	1862	55
1841	JOHN B. BRIDGMAN.....	Boston	Jan. 7,	1862	53
1813	JOHN B. BROWN.....	Boston	May 14,	1862	72
1842	JOHNSON CLARK.....	New Bedford..	Dec. 8,	1861	43
1854	EDWARD B. EVERETT....	Boston.....	Nov. 5,	1861	31
1816	AMOS FARNSWORTH	Groton	July 31,	1861	72
1819	DANIEL GREEN	Auburn.....		1862	83
1854	JOHN E. HATHAWAY.....	Worcester.....	Jan. 12,	1862	34
1837	JACOB HAYES.....	Charlestown...	Sept. 28,	1861	52
1842	CHARLES F. HOFFENDAHL	Boston.....	April 24,	1862	63
1827	HIRAM HOSMER.....	Watertown....	April 15,	1862	63
1845	ALVAN HYDE.....	Tyringham			
1837	BENJAMIN F. KITTREDGE.	Hinsdale.....	April 18,	1862	60
1840	JOHN F. W. LANE.....	Boston.....	Aug. 25,	1861	44
1837	JONAS H. LANE.....	Boston.....	Sept. 5,	1861	61
1857	WILLIAM N. LANE	Charlestown...	March 23,	1862	42
1851	THOMAS R. OWENS	Boston.....	Sept. 3,	1861	36
1813	AMOS PARKER.....	Bolton.....	Oct. 24,	1861	84
1848	TRUMAN RICKARD.....	Woburn	Aug. 8,	1861	47
1848	MOSES ROGERS.....	Falmouth		1862	41
1849	EBEN K. SANBORN.....	Rutland, Vt....	April 3,	1862	35
1830	ISAAC P. SMITH.....	Gloucester		1862	59
1832	WILLIAM THORNTON.....	N. E. Village..	March,	1862	55
1856	JAMES R. WELLMAN.....	Fitchburg		1862	32
1827	SIMON WHITNEY.....	Framingham...	Sept. 2,	1861	64
1814	JONATHAN WILD.....	Braintree.....	Dec. 8,	1861	77

OBITUARIES.

JOHN BURROUGHS ALLEY.

Dr. JOHN BURROUGHS ALLEY died in Boston, April 29, 1862, aged 41 years.

He was the son of Nathaniel Alley, and was born in Boston. He graduated at Yale College in 1840, received his medical degree from Harvard University in 1844, and after passing two years in Europe, chiefly at Paris, where he continued his studies, he entered upon the practice of his profession in Boston, where he continued to reside until his death. He never married. Although of large frame and unusual stature (he was four inches above six feet), Dr. Alley always had delicate health, and showed symptoms of consumption several years before his death. He had repeated attacks of hæmoptysis, and though more than once apparently about to sink, he would rally, and even enjoy tolerable health for a year or two.

As a practitioner he was intelligent, industrious and devoted to the welfare of his patients. The state of his health, which compelled him to avoid a great amount of exposure and fatigue, prevented him from acquiring a very large practice. But he never lost his interest in medicine, and labored unceasingly for its interests. He filled the offices of Secretary to the Boston Medical Association and Superintendent of the Boston Dispensary, and at the time of his death was a Councillor, and Recording Secretary of this Society. He was also an active member of the Boston Provident Association, from the time of its foundation, and of the School Committee for many years. In the discharge of all these duties he was most diligent and conscientious; and his remarkable capacity for business caused his services to be eagerly sought for and highly appreciated.

Bodily suffering and repeated bereavements only served to strengthen and develop his early religious tendencies. He was a sincere and faithful Christian; but his religion was free from gloom, he was always cheerful, and often gay, and few possessed a keener sense of the ludicrous. Previous to his death he arranged his worldly affairs with that method and precision which was so characteristic of him; and looked forward to his departure with the faith and hope which can only spring from a well-spent christian life.

BENJAMIN ATKINSON.

Dr. BENJAMIN ATKINSON was born at Minot, Maine, Jan. 29, 1806, and died Oct. 22, 1861.

He studied medicine with Dr. Little, of Portland, and with his brother, the late Dr. John Atkinson, at Newport. He attended lectures and took his degree at Brunswick. He began practice in West Amesbury, in 1831. He married a daughter of Dr. Seth Chandler, of Minot; and left one son, who studied medicine, but is now a Lieutenant in the army, and two daughters. He died of a paralytic affection, brought on, probably, by his being thrown from his carriage. He lingered two or three years after the accident, in much suffering.

The following just tribute is from the funeral discourse preached by his pastor:—

"How well he performed the duties of his laborious and responsible profession, those who have known him longest and best need not be reminded. If the united testimony of a great number of grateful and attached friends, who have experienced his professional kindness, can be relied upon, he has been a physician of rare fidelity. Always self-sacrificing, full of sympathy and tenderness, he never spared himself so long as he had strength to expend. His presence, his noble form, his gentlemanly bearing, and his kindly manner, always inspired confidence around the bed of sickness, and suggested supporting considerations around the bed of death. And he has ever had in his profession a more than ordinary share of success. His friends confided in his skill as well as in his kindness. To not a few among us he has thus been for many years what Luke was to Paul and other primitive Christians —'*The beloved Physician.*'"

LUTHER V. BELL.

Dr. LUTHER V. BELL was the son of the Hon. Samuel Bell, Governor of New Hampshire, and Senator in Congress, and Mehitable Bowen Dana, daughter of Judge Dana. He was born in Francestown, N. H., Dec. 20, 1806. He entered Bowdoin College in 1819, before he was thirteen years of age, and was graduated in 1823. He received the degree of M.D. at the Hanover Medical School, in 1825, but engaged in mercantile business in New York for a while, before commencing practice in Derry, N. H., where he remained till he was appointed physician to the McLean Asylum, in Somerville, in 1837. In 1834, he married Frances C. Pinkerton, daughter of James Pinkerton, Esq., of Derry, who died in 1855. They had seven children, of whom four only now survive. He resigned his situation at the McLean Asylum in 1857, and devoted himself to consultation business. In July, 1861, he joined the Army as Surgeon to the Massachusetts Volunteers, and was at the battle of Bull Run. For his efficient services on that occasion he was promoted to the rank of Brigade Surgeon. He died at Budd's Ferry, Feb. 12, 1862.

Dr. Bell was always much interested in politics. He was a member of the New Hampshire Legislature, while at Derry; and of the Executive Council of Massachusetts, under Gov. Briggs, in 1850, and filled other public offices of trust. He twice visited Europe; once for the Trustees of the Butler Asylum, at Providence, the building of which he planned.

In 1857, he was chosen President of this Society, which office he held till his resignation in 1859.

Dr. Bell always stood very high in the estimation of the community at large; his rank in the profession was, if that were possible, still higher. He was, however, chiefly known for his connection with the McLean Asylum for the Insane, at Somerville, Mass. His Annual Reports were models of their kind, always full of the wisest suggestions; and his skill in the treatment of mental disorders was widely known and appreciated. The Society in losing him has lost one of its brightest ornaments.

JOHN BALL BROWN.

Dr. JOHN CALL BROWN was born Oct. 20, 1784. He was a son of Dr. Jabez Brown, of Wilmington, Mass. He graduated at Brown University, Providence, R. I., in 1806, and studied medicine with Dr. Augustus Holyoke and Dr. Moses Little, in Salem. He began practice in Dorchester, in 1809, and returned to Boston in 1812. In 1814, he married the third daughter of Dr. John Warren. He was appointed Surgeon and Physician of the Boston Alms House in 1817, and Associate Surgeon of the Massachusetts General Hospital when that institution was first organized; and when he resigned that office, he was appointed Consulting Surgeon, which office he retained for many years.

In 1838, Dr. Brown began to devote much attention to the study and practice of orthopœdic surgery, which he was one of the first to introduce into this country. His reputation for the treatment of club-foot, wry-neck, affections of the spine and other distortions of the human frame, became very great, and he enjoyed a large practice in this specialty; and patients not only from various of the neighboring States, and from the South, but from the far West, and even from the Sandwich Islands, have journeyed to Boston for the sole purpose of being placed under his care. He was not only skilful in performing the operations necessary for the cure of these annoying and perplexing cases, but, what is more difficult to accomplish, he followed them up by mechanical means with patience and energy, until he had attained a successful result. He was possessed of great mechanical ingenuity in the invention and application of special surgical apparatus. He also wrote occasionally on subjects connected with the arts, and was the author of

many papers in the various medical Journals on subjects connected with his specialty.

After a hard fought life, having reached that position in which the practice of his profession was easy, agreeable and lucrative, and still in the enjoyment of an uncommon share of health and freshness of appearance for a man at his period of life, he was suddenly seized with his last illness, and at once calmly recognized that death was making its approaches with mathematical certainty. Having expressed his last wishes, he quietly awaited the termination, "*sans peur, et sans reproche.*"

JOHNSON CLARK.

Dr. JOHNSON CLARK was born in Wakefield, N. H., Jan. 4th, 1818. He studied medicine with Dr. Alvah Moulton, of Ossipee, N. H., and received his medical diploma at the Medical College at Washington, D.C. He commenced the practice of medicine at Bridgewater, Mass., but afterwards removed to New Bedford, where he remained until called into government service, in becoming Assistant Surgeon to the 3d Mass. Regiment. At the expiration of three months, he was detailed by Gen. Butler to remain with the Massachusetts Battalion as Surgeon. Afterwards he was appointed Assistant Surgeon to the National Coast Guard, and was to have been promoted to Surgeon about the time of his death. He devoted his whole time to the service, and was much esteemed and beloved by all. He died of typhoid fever, Dec. 8th, 1861, at Camp Hamilton, near Fortress Monroe.

A friend writes: "He was a most affectionate husband, kind and patient to all, and did a great deal of good in a quiet way."

AMOS FARNSWORTH.

Dr. AMOS FARNSWORTH was born in Groton, Mass., in 1788. He went to no College, but studied medicine first with Dr. Thomas, of Tyngsboro', and afterwards with Dr. John Warren, in Boston. As soon as his medical studies were ended, he received the appointment of Surgeon in the U. S Army. He accompanied our forces to the frontiers of Canada in 1812, and resigned his commission two years afterwards. He established himself in Boston, where he practised his profession until about 1830. After that time he retired from it. In 1832, he removed to his native town, and resided there till 1848, since when he lived in Boston and vicinity. He died in Roxbury, July 31st, 1861, aged nearly 73 years.

M. E. H.

JOHN E. HATHAWAY.

Dr. JOHN E. HATHAWAY died January 12th, 1862, at the early age of 32 years. He had practised medicine, with intervals of ill health, in his native town of Worcester, from October, 1852, to April, 1861, when he removed to the pleasant town of Shrewsbury for possible improvement to his health under agricultural occupation. His death, long expected and patiently waited for, was by extensive tuberculosis.

To many of us, Dr. Hathaway's memory is pleasantly associated with recollections of his official relations for five years with the Massachusetts General Hospital, where he passed most of his medical pupilage. He was a man of pure life and high aspirations; amiable, genial, conscientious and faithful; a good student, a good physician, and an honest man. J. S.

JACOB HAYES.

Dr. JACOB HAYES was born in Berwick, Me., Sept. 17th, 1809. He studied medicine one or two years with the late Dr. George B. Doane, of Boston, and graduated from the Medical School in Brunswick, Me., in 1836.

He commenced the practice of medicine in Eliot, Me., where he remained one year, and then removed to New Market, N. H. He resided here but a short time, when he took up his residence in East Boston. From this latter place he removed to Charlestown in April, 1847, where he spent the remainder of his days, enjoying a large and lucrative practice.

He died, Sept. 28, 1861, at North Conway, N. H., where he had gone for the benefit of his health. A. B. B.

WILLIAM HOOKER.*

Dr. WILLIAM HOOKER, of Westhampton, was born at Northampton, in Nov. 1766; the son of Rev. John Hooker. He studied medicine with Dr. Ebenezer Hunt, of Northampton. In 1788, he commenced the practice of medicine at Westhampton, and continued in the active pursuit of his profession until the close of 1831. After that year he relinquished practice, except to attend upon family connections, and in consultations.

He was ardently devoted to his profession. He had the confidence and warm attachment of his patients, and a large share of the patronage of the community in which he resided. He was a man of clear perceptions, an accurate observer of disease, and conservative in practice. He kept up a lively interest in all medical matters till within a

* This notice of Dr. Hooker was not received in time to be inserted among the obituary notices last year.

short period of his death. He had a strong religious element in his character, which rendered his declining years happy and cheerful to the last.

He died at Westhampton, Feb. 27, 1861, in his ninety-fourth year; retaining his mental faculties and all his senses to a remarkable degree, till near the close of his long life. He died of acute disease, rather than of old age. A. H.

HIRAM HOSMER.

Dr. HIRAM HOSMER, the son of Jonas Hosmer, a farmer, was born in Walpole, N. H., Sept. 4, 1798. He was the nephew of Abner Hosmer, who was killed at Concord Fight. As a boy he worked on his father's farm, occasionally letting himself to the neighbors at a compensation which, in his better days, seemed to him ridiculously meagre. He learned the trade of a cabinet-maker, which he afterwards abandoned for the study of medicine. His early education was only that which could be obtained in a district school, and one quarter spent at an Academy. In 1820, he became the pupil of the celebrated Dr. Amos Twitchell, of Keene, N. H. He also passed several months in Troy, N. Y., under the tuition of Drs. Hale and Watkins. He attended lectures in Boston, receiving his degree from Harvard University, in 1824. The same year he established himself in Watertown, where he remained till his death, which took place April 15, 1862, of ulceration and perforation of the gall-bladder, after an illness of sixty-five hours.

The medical history of Dr. Hosmer's life is invested with peculiar interest. The history of his hæmoptysis is given in Dr. Jackson's "Letters to a Young Physician," page 191. But what is more remarkable, is the number and severity of the cerebral attacks which he survived. Many years since, during convalescence from typhoid fever, he had an incomplete hemiplegia of the right side. In April, 1836, a light attack slightly benumbed the right arm. In February, 1860, he had a cerebral hæmorrhage, which two of the most eminent of the profession thought must be speedily fatal. Contrary to all reasonable expectation he rallied, instead of sinking, and early in the summer was able to walk and ride out; and two years and two months afterwards he died of abdominal disease.

The most marked effect of the last cerebral seizure, was mental and not physical. There was no paralysis of the limbs or face, and he was capable of distinct articulation; but he lost his command of language, often calling things by the wrong names, and often failing to utter anything whatever.

He had a successful career; a large experience, great professional tact, a ready and correct judgment, an appreciation of "Nature in Dis-

ease," and a perfect comprehension of, and devotion to the highest interests of medicine, in the best sense of the term.

One of our most respected associates thus writes of him:—"He was esteemed wherever he was known. He was not a great book-man, but was a diligent student of nature, and ever studied carefully the diagnosis of his patients, as well as the mode of treatment. He was judicious in the treatment of the sick, not afraid of powerful medicines when such were really needed, but more commonly employing mild remedies." * * *

Dr. Hosmer was married, Sept. 6, 1827, to Sarah Watson Grant, of Walpole, N. H., who died in 1836. Of four children, two daughters survived their mother; and of these, one died in 1842. The younger outlived all her family, and is now the distinguished sculptress, Harriet Hosmer.

E. K. SANBORN.

Dr. E. K. SANBORN died at Ship Island, Miss., April 3, 1862. He was a native of New Hampshire, and was born in the year 1827; consequently he was in his 35th year at the time of his death. When he was 13 years old, his father, also a physician, died. He studied with his uncle, Dr. G. Kimball, of Lowell. Possessing talents of a high order, he soon attained an enviable position among the promising young physicians of New England. In 1853, he was chosen lecturer on Pathological Anatomy in the Vermont Medical College, and he spent the following winter in visiting the hospitals of England and Germany. At the close of his first course of lectures in Vermont, he became connected with the Berkshire Medical Institution, as teacher of anatomy, and the year following was elected professor of surgery in the same College. On the breaking up of the school to which he was first attached in Vermont, he accepted an appointment as professor of surgery in the Medical Institution at Castleton, Vt., establishing himself at the same time in the practice of his profession in the neighboring town of Rutland.

In April, 1861, he was tendered a commission as Surgeon to the 1st Volunteer Regiment of Vermont, and proceeded at once to Fortress Monroe. Thence he was ordered almost immediately to Newport News, where he became Post Surgeon. Shortly before the departure of the "New England Division" for Ship Island, Gen. Butler, who had already seen and appreciated his energy and efficiency at Fortress Monroe, solicited his farther services as Surgeon of the 31st Reg. Mass. Vols. The proposition was favorably entertained, and with a commission from Gov. Andrew, he forthwith joined his regiment on board the Mississippi. The repeated disasters and perils of that ill-fated ship are

well known. On reaching Ship Island he had become sadly prostrated, both in mind and body, by the unremitted fatigues and anxiety of the voyage, so that in less than two weeks from the day of disembarking, he sank away, without showing any evidence of actual disease, apparently from mere physical exhaustion.

Thus, as remarked by Gen. Butler, "the service lost a good officer, the profession an able member, and the country a patriot and good citizen."

Although taken away at an early age, there is left upon record gratifying evidence of his ability and usefulness. His communications to medical periodicals were few, but valuable. Among them were "Fractures of the Patella, treated by Adhesive Straps;" "Ligamentous Union of the Radius and Ulna treated by Drilling and Wiring, after Failure by other Means;" "Ununited Fracture of the Humerus, cured by the same Method." "A new Method of treating large erectile Tumors, with a Review of the Pathology of the Disease, and the different Modes of Treatment," was a more elaborate article, showing not only remarkable success in a given case, but furnishing also suggestions of general application to this particular class of disease.

JONAS HENRY LANE.

Dr. JONAS HENRY LANE, born in Lancaster, Mass., on the 29th of January, 1800, pursued his preparatory course of study in several academies; enjoying in Lancaster the instructions of the now distinguished Jared Sparks; and finished the University course in 1821. His medical studies were directed by Drs. Pearson in Westminster, Wyman in the McLean Asylum, and Spooner in Boston; to which course he added an attendance on two full terms of lectures at the Harvard Medical College. The degree of M.D. being conferred upon him by the University in 1826, he immediately entered on the practical duties of his profession in Boston.

He was married on the 6th of October, 1830, to Frances Ann Brown; and on the 5th day of September, 1861, he closed his honorable and useful life in this city, leaving her a widow with three children.

Dr. Lane was an honor to his profession, a benefactor to the afflicted, and an ornament to the Christian Church; ever walking closely in the footsteps of him who was "meek and lowly in heart," and "who went about doing good." While not behind his brethren in thoroughness of preparatory study of the profession, and not remiss in the pursuit of the ever-growing knowledge which our active age supplies, he excelled many, perhaps the most, in what may be called the moral department of his profession. Above the petty tricks and management which are

alike unfair to the profession and delusive to the patient, he was honorable, high-minded, pure-hearted.

In his experience, it was made manifest that the disposition and address of a physician are as really instruments of his profession as skill in diagnosis and prescription. Every patient felt that he had in him a sympathizing friend. His visits were welcomed as expressions of fraternal affection. His very countenance and tones of voice were a medicine to the mind diseased, imparting a moral tone to the patient which increased the beneficial action of medical appliances.

Besides a native modesty and quietness of disposition, which kept him from any degree of public prominence, he was for many years an invalid, which caused him to withdraw from general practice, and from even a general intercourse with his brethren. But the few who were favored with his ministrations to the last, saw not only the permanence of all his nobler characteristics, but a vivid illustration of that declaration of sacred writ — "The path of the just is as the shining light, that shineth more and more unto the perfect day." E. N. K.

JOHN F. W. LANE.

Dr. JOHN F. W. LANE was born in Boston on the 14th of June, 1817. He entered Harvard University, where he graduated with the highest honors of his class, in 1837. He commenced the study of medicine in the office of Dr. Winslow Lewis, in 1839, and the third year of his pupilage was passed as House Physician at the Massachusetts General Hospital. Before entering College, he had spent some time in Europe, where his active mind laid the foundation of that enlarged information which distinguished him in after life. He was an excellent classical scholar, and well versed in some of the modern languages.

Dr. Lane's physical frame was not constituted for the arduous duties of a physician; but notwithstanding the delicacy of his constitution, he engaged actively in his profession, and was able, by hard work, not only to support himself, but to aid in the education of others of his family who required it. He had quite an extensive obstetric practice.

Dr. Lane was always more or less occupied with his literary pursuits. He made an excellent translation of Milne Edwards's Outlines of Anatomy and Physiology, from the French; also a translation of a French work on the Diseases of the Voice. He was the author of Lane's Physiology for the use of schools. He also took some of the medical prizes.

After repeated warnings of disease, he suddenly died in Boston on the 25th day of August, 1861, aged 44 years. J. M. W.

WILLIAM NOURSE LANE.

Dr. WILLIAM NOURSE LANE was born in Chester, N. H., July 16, 1820. He was the youngest of four children, and his father died before he was three years old, leaving the family with limited means of support. He received his early education at the Nashua Literary Institution, then and now under the supervision of David Crosby, Esq. He was very desirous of obtaining a collegiate education, and ever regretted his inability to do so. In order to procure the means of acquiring his medical education, he became a daguerreotypist, in Nashua, and obtained a large and lucrative business. He completed his studies at the Harvard Medical School in 1853, and was House Surgeon in the Massachusetts General Hospital for a year. He began practice in Charlestown in 1854. He was an intelligent and successful practitioner, and was regarded by his professional brethren as a high-minded and honorable man. His health declining, and having symptoms of phthisis, he undertook a voyage to the south during the autumn and winter months of 1861, in hope of relief, and acted as surgeon on the gunboat "Midnight," off Galveston, during the winter. He reached New York, on his return home, March 19th, and died on the 22d of the same month at the La Farge House. A. B. B.

JESSE MERRILL.

Dr. JESSE MERRILL was born in Peacham, Vt., Aug. 1st, 1794. He was educated at Dartmouth College, and graduated in the medical class of 1818. He began practice in the village of Franklin (then Salisbury), N.H., and for twenty-five years was the leading physician of the village and many of the surrounding towns. Few physicians in New Hampshire had a larger practice than himself, or were more successful in the treatment of disease. His unremitting toils, his large and increasing practice, promising no rest for coming age, he decided to remove to Boston. Here he continued for a few years, and would probably have remained to the close of his life, but his wife having died, he removed to Hopkinton, where he spent the last years of his life. In 1854, he had an attack of pleurisy, which terminated in an extensive effusion into the left side of the chest. The effects of this effusion were so distressing, that he came to Boston to have the operation of paracentesis thoracis performed. This was done by Dr. Bowditch, and one hundred ounces of a pale straw-colored fluid were removed, with the greatest relief. Convalescence was slowly yet surely established, and he was soon able partially to resume his practice. Although his health for the last few years of his life was usually good, yet there can be little doubt that this attack laid the foundation for the disease which six years afterwards terminated his labors.

Dr. Merrill died Nov. 18th, 1860, from pleurisy, no doubt contracted by exposure to wet and cold while attending to his professional duties.

He was a man of fine sensibility, of sterling worth and unflinching integrity. In his profession he was thoroughly read, and in the investigations of disease most carefully discriminating; his conclusions consequently were not hasty, his diagnosis seldom wrong. He had, besides, a rare facility for the adaptation of means to ends, that made him a successful practitioner; whilst his sympathizing nature, his genial heart and hopeful spirit, were like sunlight in the sombre shades of the sick chamber, and made him the beloved physician.—*From a Biographical Sketch in Bost. Med. & Surg. Journal.*

AMOS PARKER.

Dr. Amos Parker, son of Hollis and Louisa (Bragg) Parker, was born at Princeton, Oct. 17th, 1777 (the day of the surrender of Burgoyne). He studied medicine with Dr. John Green, at Worcester; and came to Bolton as a medical practitioner—successor to Dr. Abraham Moore, who had just died—March 19th, 1803. He never received the regular degree of M.D. from any institution, but in 1811 was elected a member of the Massachusetts Medical Society. In 1808, under Jefferson's administration, he was appointed post-master of the town, and retained the office till 1850. On the 24th of October last, while passing a few days at his farm in Shrewsbury, he died, in the night, somewhat suddenly, though he had repeatedly given intimation previously, that he was liable to drop away at any moment. There was no autopsy, but the disease of which he died was supposed to be dropsy of the heart.

Living the life of a good man, endeavoring to serve his day and generation faithfully, he died — there is reason to believe — a sincere Christian believer. R. S. E.

TRUMAN RICKARD.

Dr. Truman Rickard was born in Cornish, N. H., Feb. 12th, 1814, and died at Woburn, August 8th, 1861, at the age of 47½ years. He graduated at Hanover in the class of 1842, and received his degree of M.D. at the same College in 1847. The same year he took up his residence in Woburn, and was engaged in the practice of his profession for fourteen years. During his residence here he filled several important town offices. He was one of the superintending school committee for several years, took an active part in organizing the Town Library, in all its details, and making it a credit to the place. He was thoroughly acquainted with the indigenous botany of New England, and an active member of the Woburn Natural History Association. But especially he was one of the most reliable and working members of the

Middlesex East District Medical Society, in whose meetings for medical improvement he took a deep interest from its organization, frequently furnishing well written articles on various medical topics. Nothing that passed through his hands was done in a careless manner, but in such a way as would task the abilities of far greater men to improve. As a physician, he was kind, affectionate, and exceedingly attentive, as many can speak from experience; and the presence of his cheerful countenance in the chamber of the sick was almost as good a balm as the medicine which he dispensed. Like so many of the profession, he wrought up to the last week of his life, and the report of his sudden decease fell with a startling shock upon the community in which he dwelt. B. C.

ISAAC P. SMITH.

Dr. ISAAC P. SMITH was born in Manchester, on the 25th day of April, 1802. He fitted for College at the academies of Salisbury and Atkinson, N. H. In order to obtain money to pursue his education, he taught school during two terms of thirteen weeks each, and after this continued to pursue his studies under the direction of Rev. Samuel M. Emerson, of Manchester.

Having finished his preliminary studies, he entered the office of the late Dr. Asa Story, where he remained a pupil for three years. He attended lectures at the medical department of Harvard College, from which institution he received his degree in 1825. A few months afterwards, he married Miss Hannah Wallis, of Beverly, and commenced the practice of medicine in Malden, and there resided seven years. He then removed to Gloucester, in which town he continued to practise until the beginning of his illness, which proved fatal on the 9th of March, 1862. His disease was jaundice, and his sickness was of eight months duration.

JAMES R. WELLMAN.

Dr. JAMES R. WELLMAN died at Cornish, N.H., July 25th, 1861, aged 32 years. The following extracts are taken from an obituary notice of him, printed in the *Fitchburg Sentinel.*

Dr. Wellman was born at Cornish, N.H., July 27th, 1829. In 1853 he commenced the study of medicine with Dr. Hitchcock, of Fitchburg, and after an attendance upon courses of lectures at Hanover, Boston and New York, he was admitted to the degree of M.D., at Dartmouth College, in 1855. He was immediately appointed resident physician to the Demilt Dispensary in New York, the laborious and responsible duties of which office he performed for one year. He then became associated in business with Dr. Hitchcock, in the practice of his pro-

fession in Fitchburg. In 1856 he sailed for Europe, and spent nearly a year in the hospitals of England, France and Germany. On his return he resumed practice in his former place, and devoted himself unremittingly to the duties of his profession, until within a few weeks of his decease.

He was an honest man, and had an instinctive detestation of all cant and hypocrisy, whether manifested in the social, political, religious or professional walks of life. He loved his profession, and with all who intimately knew him, he enjoyed the well deserved reputation of being a thorough medical scholar, and a discriminating, safe, and successful practitioner.

SIMON WHITNEY.

Dr. SIMON WHITNEY, son of Nathaniel R. Whitney, was born in Watertown, Oct. 30, 1797. He entered Harvard University at the age of 17, and graduated with honors in the class of 1818. Soon after, he commenced the study of medicine with Dr. William J. Walker, of Charlestown. He graduated at the medical commencement of 1822, and commenced practice in Framingham the following May. There he lived in the midst of an extensive practice, having the confidence and esteem of all who knew him. He was noted for his success in the noble profession to which he devoted his life, and for his kind and generous character as a neighbor and a citizen. He died after a short illness, Sept. 2d, 1861, at the age of 63 years, 10 months. J. W. O.

JONATHAN WILD.

Dr. JONATHAN WILD, son of Jonathan and Deborah Wild, was born in Braintree, April 3d, 1784, and died of paralysis in Braintree, Dec. 6, 1861, aged 77 years and eight months.

He entered Harvard College in 1800, and graduated in 1804; studied medicine under the direction of Dr. Ebenezer Alden, of Randolph, attended the medical lectures of Harvard College, and was licensed to practise by the Censors of the Massachusetts Medical Society, of which he was admitted a Fellow in 1814.

He commenced the practice of his profession at Randolph, soon after the death of his medical instructor, and continued there until 1812, when he removed to his native town.

In early life he was much occupied in public business. He was for many years a magistrate, and was frequently elected to offices of honor and trust in the town. Towards the close of life, his body and mind both became so much enfeebled, that he was under the necessity of retiring from all active pursuits. He was esteemed by his employers as a kind and judicious physician. A.

HYPODERMIC INJECTIONS

IN THE TREATMENT OF

NEURALGIA AND OTHER DISEASES OF THE NERVOUS SYSTEM.

BY A. RUPPANER, M.D.
OF BOSTON.

THE subject of hypodermic injections in the treatment of neuralgia and other disorders of the nervous system, has of late greatly engaged the attention of medical men, both in Europe and America. Brought before the medical world a few years ago by Dr. Alexander Wood, of Edinburgh, in a small treatise, entitled, "On a new Method of treating Neuralgia by the direct Application of Opiates to the painful Points," and in a communication to the *British Medical Journal* (August 28th, 1858, p. 721), the subject has grown in importance in proportion to the testimony in its favor, by reliable medical men, who have given it a fair and impartial trial. "In Edinburgh," says Dr. Wood,* "the use of this instrument has become nearly universal (in the treatment of neuralgia), and the efficacy of the process is well known. I could narrate a vast number of cases in which it has proved eminently successful." Dr. Fuller, Physician to St. George's Hospital, London, speaking of this new method of treatment in his late work on Rheumatism, Rheumatic Gout and

---

* Braithwate's Retrospect, Part 38.

Sciatica*, remarks: "I have seen it produce effects as satisfactory as they were astounding. The agonized sufferer, who for many days and nights in succession has been unable to close his eyes, or obtain a moment's repose, notwithstanding the internal administration of morphia in large doses, has fallen into a calm sleep within a few minutes after the injection has been commenced." Drs. Hunter and Page, of London, Drs. Béhier and Becquerel, of France, and many others, are strongly in favor of this therapeutic agent. In foreign and American medical journals, successful cases are repeatedly reported.

Before considering, however, the subject proper, may I be permitted to allude briefly to the claim of priority of this operation. Whether or not the introduction of narcotics into the system, by means of subcutaneous injection, be a new one, or whether this modus operandi has been long known to the profession, certain it is, that to Dr. Alexander Wood, of Edinburgh, are we indebted for directing our attention to this agent. Next, we will notice the improvement in the construction of the instruments, so that we are enabled to calculate and divide the fluid to be injected, even to the extent of half a minim. Nor was I aware, till within a short time, of any one having disputed with Dr. Wood, or rather claimed the credit of priority of this treatment.

Mr. F. Rynd, Surgeon to the Meath Hospital, &c., Dublin, however, in the *Dublin Quarterly Journal of Medical Sciences* for August, 1861, after describing an instrument of his own construction for the operation, further remarks: "The subcutaneous introduction of fluids for the relief of neuralgia, was first practised in *this country* by me, in the Meath Hospital, in the month of May, 1844. The cases were published in the Dublin *Medical Press* of March 12th, 1845." Mr. Rynd evidently limits the expression "in this country," to

* London, John Churchill, 1859, 3d Ed.

Ireland; and his cases were published already in March, 1845, whilst Dr. Wood's first case occurred at the end of November, 1843, in Edinburgh. His first papers on the subject were published in the same city, in 1855, and in the *British Medical Journal* of August 28th, 1858. None, however, will deny the valuable labors of Dr. W., the Edinburgh Professor, in this direction. No man has done more than he to enlist the attention of physicians in this subject. But whilst Dr. Wood confined himself solely to cases of neuralgia, Dr. Hunter, of St. George's Hospital, London, and Dr. Béhier, of France, did not rest there, but demonstrated, by experiments, the applicability of hypodermic injections to many other disorders of the nervous system; so that we are able to record not only cases of neuralgia successfully treated, but also cases of paralysis, tetanus, delirium tremens, chorea, mania, continued wakefulness, &c.

Having premised thus much, I shall now consider —

First, *The requisites for obtaining satisfactory and safe results.*

Secondly, *The history of* 210 *cases reported by* 18 *physicians and surgeons.*

Thirdly, *The advantages obtained by this treatment.*

Fourthly, *The disadvantages arising from this treatment.*

First, *The requisites for obtaining satisfactory and safe results.*

They are briefly:

(*a*) That the case be a proper one for treatment.

(*b*) That a proper instrument be employed.

(*c*) That a concentrated solution of the narcotic or sedative be used.

(*d*) That the dose or quantity of fluid to be injected be duly considered and exactly known.

(*e*) That the proper place be chosen for the operation, and the injection be not repeated at short intervals at the same point.

(a) *That the case be a proper one for treatment.*

Here we must distinguish between neuralgia proper, and those disorders of the nervous system, such as paralysis, delirium tremens, tetanus, chorea, mania, &c., to which the field of application of this agent has of late been extended. In the latter diseases, the diagnosis is generally easily arrived at; in the former, the disease occurring in all the most possible forms, and in subjects of all ages, habits and occupations, the difficulty is often increased from our inability to decide whether the case under consideration be one of a purely neuralgic character, unconnected with local organic lesion and irritation in distant parts of the body. If the patient be subject to rheumatism or gout, or infected with a syphilitic taint, or suffering from gastric and intestinal irritation, or exhibiting symptoms of disease of the brain, or if we suspect pressure upon the nerve itself, caused either by a tumor or by thickening of the bony canal through which a branch of a nerve passes, we cannot expect much success from subcutaneous injections — except temporarily — unless we use, at the same time, constitutional remedies appropriate to the case. In so far as this can be done, subcutaneous injection, with judicious constitutional treatment, will seldom disappoint the practitioner. Nor should we overlook the action of the heart and the age of the patient. The effect of the operation is so decided and manifests itself so quickly, that no physician would ever think to venture upon its use in a case of neuralgia complicated by heart disease, or great debility, or old age.

As a general rule, it will be found that the curative effect of the operation is most manifest in uncomplicated cases of recent standing, and in those which are most benefited by morphia applied to the blistered surface. Hence to test the value of the present proposed method of relieving the pain, it is essential that the application *in neuralgia* be limited to purely neuralgic affections — where the pain is ac-

tually seated in the course of the nerve; and it must, moreover, be remembered, that agreeably to the laws by which nervous action is propagated, the irritation, that is, *the pain*, may be seated directly *on*, or reflected indirectly *on the nerve*, at any point between its extreme peripheral distribution and the point at which it joins the brain.

(b) *That a proper instrument be employed.*

The instrument employed may be either that of Travoy, used for the injection of perchloride of iron, or that recommended by Ferguson for injecting a nævus, or the simple instrument constructed by Young, of Edinburgh, or Tiemann, of New York. It consists of a barrel made either of glass or caoutchouc, containing a piston, which may or may not be regulated by a screw rod, so that at each half turn a drop of the fluid is expelled from the needle which is screwed to the barrel. The syringe we generally employ is that manufactured by Tiemann, of New York, holding half a drachm of fluid. It answers very well when the quantity to be injected is quite large, and the number of drops need not definitely to be known. As the exact knowledge of the number of drops to be injected is, however, the great desideratum, and the most important element, a screw-syringe, giving the exact number of minims, is to be preferred. To the body of the syringe are attached hollow needles of various lengths. The point of the needle is sharp, and perforated on one side by an oblique opening, through which the narcotic is expelled. Undoubtedly, the finer the needle the better, as the chances of loss of blood are diminished; the fluid is less apt to ooze out, and the wound is next to nothing, Mr. Hunter uses needles made of silver, with a hardened gold point; one of tempered steel, however, answers every purpose.

In all cases, the use of a lancet to make the required incision, and the insertion of the nozzle of a small glass syringe under the skin, for the purpose of injecting the nar-

cotic, ought to be abandoned, as causing considerable bleeding, increasing the danger of abscesses, and favoring the escape of the fluid injected; not to speak of the unnecessary pain given to the patient through the operation, and the time lost thereby. I am particular to make this statement here, since shortly after the publication of my article on the same subject in April, 1860, in the *Boston Medical and Surgical Journal*, a physician in the State of New York addressed me, asking whether he might not use a lancet and a glass syringe for the operation at the supra-orbital foramen, in place of the syringe and needle I had recommended.

The use of the instrument, or the operation, rather, is most simple. Hold with the left index finger and thumb a fold of the skin of the patient, so as to make the part beyond the fingers tense; let the point of the needle, held at a right angle to the skin, be pressed through it with a quick and steady movement, and when pressed through, give it any direction which seems most practicable and determined upon beforehand.

This manœuvre, as well as the injection of a determined number of drops, is the work of a second. The syringe withdrawn, the thumb must be pressed for a moment upon the puncture, so as to prevent the escape of any fluid from it. Never put adhesive plaster upon the point of perforation, as pressure answers all ordinary purposes. When the skin is held tense, as directed, the pain of the operation is greatly diminished; it is very severe when held loose or not at all; and there is danger that the needle may break. Unimportant as these directions may seem, upon their execution depends the success or failure of the operation.

(c) *That a concentrated solution of the sedative be used.*

Our duty is to avoid the injection of a large quantity of fluid, whereby the cellular tissue might be unduly disturbed. If the solution be concentrated, a few drops can be injected

in a moment, before the patient is aware of the operation, often so much dreaded. Large quantities of fluid naturally distend the cellular tissue, are slowly absorbed, and remain generally for several hours, nay, even a day or two, causing thereby much disturbance in the cellular tissue, and much pain to the patient. The first operation I ever performed, in a case of facial neuralgia of the most aggravated nature, taught me a good lesson. I injected half a grain of sulphate of morphia dissolved in thirty drops of water, at the infra-orbital foramen. The result was, a swelling under the inner angle of the eye, of the size of a walnut, causing the patient much pain, and disappearing only, little by little, in the course of two days — giving me great uneasiness, as I feared the formation of an abscess there. No doubt the danger from abscess after the operation, in some cases, is owing to the irritation caused by the excess of fluid injected. This principle, however, is now better understood, and we hear and read very little, of late, of the dreaded abscess following the injection. It is self-evident, that, the stronger the solution employed, the smaller the number of drops needed to accomplish our object. Dr. Wood uses Battley's solution, which is a preparation of double the usual strength of tincture of opium. Dr. Hunter and others inject sulphate and muriate of morphia; in France, particularly with Dr. Béhier, sulphate of atropia is exclusively used. The same physician injects sulphate of strychnia in paralysis.

(d) *That the dose or quantity of fluid to be injected be duly considered and exactly known.*

Our object is to procure a certain effect with as small a quantity of fluid as possible. Medicines introduced into the system by the stomach, rectum or skin, produce effects not in the ratio to the quantity taken, but in the ratio to the quantity absorbed. On the other hand, by the injection of narcotics, or other fluids — a method as accurate as venous injection, yet surpassing the same, having none

of its dangers — the whole effect of the quantity introduced will be manifest in a few minutes, as the fluid is at once taken up into the circulation. From five to ten minims will give ease and comfort in as few minutes; five or ten drops more may put the life of our patient in jeopardy, or at least be productive of much distress to him, and of much anxiety to ourselves. Sudden fainting, unseasonable and continued drowsiness, distressing vomiting, continuing for hours — all these may be avoided by due care.

The danger therefore is, in producing *too great an effect*, and the question naturally arises: What amount is to be injected? It is impossible to give a definite answer to this question, or to establish an invariable rule. The history of the case, elicited from our patient, must be our guide. Age and sex are primary conditions. As for the rest, we must judge from our experience in the matter, and from experiments. The following summary deserves attention:

1. Chronic cases require a larger dose.

2. The dose for females ought to be smaller than that for males.

3. First injections ought always to be smaller than subsequent ones, for the sake of safety. As a general rule, half the ordinary stomachic dose for males, and the third for females, ought to be used.

4. If the injection has to be repeated, the quantity can easily be increased. In such cases, sufficient time must be allowed to elapse for the effect of the first injection to pass off, before delivering the second. In 174 cases, reported by eighteen different physicians, where the exact quantity injected has been stated, the first injections for adult females vary from $\frac{1}{8}$ to $\frac{1}{3}$ of a grain of morphine, dissolved in a few drops of water; for adult males, from $\frac{1}{6}$ to $\frac{1}{2}$ or $\frac{3}{4}$ of a grain of the same. My average minimum dose for females is $\frac{1}{6}$ of a grain, and $\frac{1}{4}$ of a grain for males.

5. In delirium tremens, mania, tetanus and paralysis, the first quantity injected may be more powerful than in cases of neuralgia. Large doses of narcotics may be injected with perfect safety in proper cases. Thus, in a case of traumatic tetanus, under the care of Dr. W. Read, of this city,* I injected two grains of acetate of morphia in four operations, one directly after the other, without any ill effects. Dr. Béhier, of France,† reports having used 61½ minims of a solution of sulphate of strychnia, in several cases of paralysis, in one injection, and to have repeated the operation six times. In fact, we are hardly as yet aware to what extent this treatment may be carried; and further experiments are required to lay down safe and reliable rules.

(e) *That the proper place be chosen for the operation, and the injection be not repeated at short intervals at the same point.*

A diversity of opinion exists among physicians as to the *localization* of the operation, in neuralgia at least.

Dr. A. Wood, taking for the basis of his experiments the valuable treatise of Mons. Valleix,‡ in a communication to the *British Medical Journal*, of Aug. 28th, 1858 (p. 721), as well as in all his previous and subsequently published papers relating to this subject, recommends the injection of the fluid at the *foyer*, or *seat of pain*, or as near to it as possible. This rule, however, applies only to neuralgia in its various forms, and perhaps to local rheumatism, where the affection is local, and not general, as in delirium tremens, for example.

On the other hand, Mr. Charles Hunter, late of St. George's Hospital, London, and one of the first and most assiduous promoters of this treatment, in a paper on this subject declares§ that localization of the injection is not a

* Boston Med. and Surg. Journal, Jan., 1861.

† Championniere's Journal.

‡ Traité des Nevralgies. Paris: 1841.

§ Med. Times and Gazette of March 5th and April 6th, 1859, pp. 234 and 387.

condition necessary to the success of the treatment. "I have tried," he writes, "Dr. Wood's treatment and localization of the narcotic injection to the neuralgic part, and found it productive of considerable relief; as, however, I found frequent repetition of the injection in the same spot productive of abscess, I employed the hypodermic injection of other parts of the body, avoiding localization of the injection; and I have found that the hypodermic injection of the cellular tissue, beneath the cutis of any part of the body, is quite as striking and as curative in its effects as the injection localized to the neuralgic tissue; moreover, it has these advantages, viz., that inflammation is less likely to follow, and less pain must necessarily accompany the injection of a sound than an unsound or morbidly sensitive part. In such cases as tic douloureux, sciatica, and constant or occasional pains of these nerves, a cure may follow a single injection; or if not, more or less benefit will in all probability be effected. *I have had no case in which some benefit was not produced.* But from the cases of this description that I have had under my care, I cannot find that localization of the injection adds at all to the cure, except in those cases in which the mind of the patient has something to do with it, and there is a confidence alone in the local treatment."

Mr. Hunter cites many of his cases to strengthen his assertions on non-localization of the narcotic injection. His cases of sciatica are the most numerous. He injects the narcotic almost invariably into the cellular tissue of the arm. In tic douloureux, he believes that great benefit, if not a cure, generally attends the hypodermic introduction of narcotics; but that the localization of the treatment to the neuralgic part is necessary, he does not maintain. The following, one of his cases, I select, as being to the point.

"*Tic Douloureux.*—A lady, suffering acutely from neuralgia of many months standing, sent for me to employ this

treatment. She had taken hyoscyamus, opium and morphia internally, with no effect on the neuralgia; but they all more or less affected her head. She also tried the endermic application of morphia. She found the endermic method, which was employed over the part affected, give her more relief than the administration of the narcotic by the stomach; but the effect lasted only a few hours, and she was as bad as ever the next day. The situation of the tic was the side of the face and head. I injected a little more than half a grain of morphia into the arm; giddiness came on in three minutes, followed by considerable sickness and subsequently by sleep. The pain ceased at the time, and has never since returned. It is now between three and four months since the dose was injected."

Differing from the views of Mr. Hunter, M. Béhier, of France, physician to the Hospital Beaujon, in a paper read before the Academy of Medicine, on this important therapeutic question, and reported in the Gazette des Hôpitaux,* is of opinion, that, when we have to contend with neuralgic or rheumatic pain, we should perform the injection, as far as possible, on a level with the seat of pain, and on *that precise spot.* The following are some of the facts on which he bases this precept.

"One individual, suffering from a rheumatic affection of both deltoids, was cured the first day, on the right side, by an injection into the substance of the right deltoid, without the congeric muscle having been in anywise modified."

"Several times," adds Dr. Béhier, "I have attempted, in order to verify Mr. Charles Hunter's opinion, to perform injections in a region remote from the seat of pain, without ever having obtained any decided result. A few days since, I introduced into the deltoid of a subject affected with sciatica, ten drops of sulphate of atropia, without any benefit to the femoral neuralgia."

* Championniere's Journal, vol. xxx., Art. 5680.

We might multiply like testimony. Most observers, except Mr. Hunter, believe in localization of the remedy, at least in neuralgia. It is to be regretted that many who have reported successful cases in medical journals, have omitted to mention whether the fluid was injected at the painful point or not. In 48 cases which I treated in my own practice, and 35 of which were cases of neuralgia, and some of these of long standing, I have invariably found the plan of localization the most successful. Observation tends to demonstrate, that when the narcotic is introduced at the most painful point, easily ascertained by pressure upon the nerve, relief will be obtained, almost immediately, in many cases; whilst, on the other hand, the plan of non-localization being followed, several minutes, often a much longer period, as well as a larger quantity of the narcotic, is required to produce the desired effect.

M. Valleix* has surveyed most carefully the various branches of nerves, with reference to neuralgia, and has indicated, not only the various points of convergence and union of the nerves affected, but he has pointed out more particularly each spot where we may expect the pain to be seated, and where it is most amenable to treatment.

In a paper of mine on the subject of subcutaneous injection (vide *Boston Medical and Surgical Journal* of April, 1860, et seq.) I have, under the head of "*Pain and its Localization*," spoken at length of M. Valleix's work, and have arranged in tabular form the points of emergence of the fifth pair of nerves as an example, by means of which we have a guide, at least in very many cases, where the instrument is to be inserted, when the pain is prominent in a principal trunk, or in some particular branch.

Till now, I have found no adequate reason to change my opinion formerly expressed, that the success of this treatment depends in a very great measure upon a thorough

* Op. cit.

knowledge of the places of convergence of the nervous trunks; nor am I, as yet, willing to believe, that in a given case of neuralgia or local rheumatism, it is immaterial whether we inject the narcotic at or near the painful point, in the face, or into the arm or the great toe.

Mr. Hunter's greatest objection to localization is, that the introduction of fluids into the cellular tissue has been found to be very liable to favor the formation of abscesses, when frequently repeated in the manner recommended by Dr. Wood.

"The non-localizing plan has this advantage," says Mr. Hunter,* "that no abscess results in cases where several injections are required; for example, in a patient with severe neuralgia of many years' standing, I at one time employed the injection three times a day, varying the site each time. The patient was cured, and had no abscess whatever in the parts injected. Another patient, with tic douloureux, who would have the injection employed locally, had considerable tenderness and some inflammation as the consequence. The non-localizing plan, employed subsequently, caused no irritation."

Against this opinion of Mr. Hunter, we have again the strongest testimony to the contrary. Dr. Wood, who has treated, perhaps, more cases of this nature than any other medical man, has experienced no difficulties in this respect; at least, he does not mention the fact in any of his published writings bearing on this subject. On one of his patients he made over 100 punctures without any ill effects. Again, in 227 punctures made by Dr. Béhier, not one local accident had occurred.†

M. Becquerel, of France, made analogous injections in 21 patients, with complete success in 20 cases, and without a

---

* Medical Times and Gazette.

† Op. cit.

single subject having suffered swelling or suppuration of the punctured part.

Hérard, in a late number of *L'Union Médicale*, speaks in the highest terms of subcutaneous injections in neuralgia, and declares, in 25 injections no evil consequences whatever appeared in the neighborhood of the wound. The experiments made in France substantiate, therefore, the allegations of Dr. Wood. Other British practitioners — for in Great Britain this method has of late become very popular — make little or no mention in their reported cases concerning the danger of abscesses or local irritation.

In this country, those who have paid attention to this mode of treatment ignore equally the danger from abscess. Of the 48 cases in my own practice, and granting that in each case I made on an average only 5 punctures (though in one case of sciatica I have injected the narcotic into the leg at least 75 times, if not oftener), which gives a total of 240 punctures, I never incurred the least danger from an abscess at the painful point. It is, however, essential that the injection be not repeated at the same point for at least 24 hours, but a puncture may be safely made a little above or below the original point. Moreover, let the quantity injected be small. Thus no danger need be apprehended from the formation of abscesses. Carelessness alone could account for such an accident, as the evidence preponderates strongly in favor of the localizing plan of treatment.

Mr. Hunter's experiments, made with a view of discovering whether the action of the remedy depended on the localization at the painful point, or whether it would also produce the desired effect if introduced into other parts of the cellular tissue, proved unmistakably, that subcutaneous injection is much more widely applicable than to neuralgia only, as its first advocate, Dr. A. Wood, had intended. When all other measures have been tried and failed, as is but too often the case, to bring sleep to the restless patient, ha-

rassed by excruciating pain; when the delirious or the maniac actually defies all restraints put into service; when tetanic spasms exclude the possibility of introducing medicines into the stomach; when that member itself refuses any longer to perform its accustomed duties; when rheumatic pain constantly shifts from place to place; in surgical injuries, in puerperal peritonitis; in short, in all those affections where the nervous system at large is affected, where the pain is more or less general, the hypodermic injection of narcotics has been tried, and in all cases the effect was immediate, or nearly so, quiet or sleep either sooner or later supervening. To Mr. Hunter belongs the credit of having demonstrated the extended applicability of hypodermic injections, and in these latter affections, localization, as he maintains, is not a necessary condition to the success of the operation. Evidence in its favor daily multiplies, and there is little doubt will continue to multiply, the more extensively this therapeutic agent is used in practice.

Secondly, *History of* 210 *Cases reported by* 18 *Observers.*

Facts are needed to form a correct opinion of the value of hypodermic medication. I have collected from the most reliable English, French, German and American sources, 210 cases in which this mode of treatment has been employed, including 48 cases which were treated by myself. For convenience of reference I have arranged the whole in tabular form, to be followed by a detailed account of the cases most to the point of interest.

(a) *Cases of Neuralgia.*

Of the 129 cases of neuralgia given in the table, I shall speak in the order indicated therein. I shall also mention, as briefly as possible, the history of such cases as seemed to me to be of special interest.

Tabular View of 210 *Cases of Neuralgia and other Diseases, treated by Subcutaneous Injection.*

Operator.	Number of Cases.	Sex.		Facial Neuralgia.	Intercostal.																		Paralysis.				Result.			
		M.	F.		Hemicrania.	Cervico-Occipital.	Cervico-Brachial.	Uncomplicated.	In Tubercular Subjects	Strange Symptoms.	Pleurodynia.	Lumbo-Abdominal.	Neural. of upp. Extrem.	Sciatica.	Pains symptomatic of Cancer in Utero.	Rheumatic muscular Pains.	Tetanus.	Delirium Tremens.	Mania.	Chorea.	Continued Wakefulness	Puerperal Peritonitis.	Contusions.	Sprains.	Chest Asthma.	Dysuria.	Wound of the Eye.	Pains dependent upon other Affections.	Paraplegia.	Of lower Extremity.	Of Deltoid.	Hemiplegia.	Cured.	Relieved.	Not Relieved.	Not Reported.
Dr. Wood, Scotland,	15	4	11	1	2	1	1					4	1	5																10	4	1	
Wright, England,	2		2		1								1																	1	1		
Mr. Hunter, London,	19	8	11	6	1									4			1	2	1	2	2									9	9	1	
Burns, England,	1		1	1																										1			
Dr. Cowdell, "	5	2	3											4																5			
Mr. Barton, "	4	2	2		1							1		2																1	2	1	
Spender, "	4	1	3	3										1																1	3		
Dr. Dupuy, France,	1	1															1													1			
Fuller, London,	1	1												1																1			
Bélier, France,	60			1				9	2	1	4		1	18	1	11											3	5	1	1		25	15		20
Becquerel, "	*21																														20	1		
Fournier, "	1		1														1					2									1			
Hérard, "	10			1										3		3						1								2		9	1	
Scanzoni, Germ.	1		1																												1			
Read, Bost., U. S.	1	1																			1										1			
White, Boston,	4	4																4													4			
W. H. Thayer, N. H	12	7	5											1				1													6	6		
Ruppaner, Boston	48	21	27	24	1		1	2						16		1	1	3				1	1	4	1	1					27	17	4	
	210	52	67	37	6	1	4	11	2	1	4	5	3	55	1	16	4	10	1	2	2	1	4	1	3	1	1	3	5	1	1	2	114	68	8	20

* *Various cases not reported.*

Summary.—Cases of Neuralgia, ... 129
Cases of General Nervous Disorders, . . 60
Cases of Dr. Becquerel (no particulars), . 21
Total Cases, 210

Summary.—Cases cured, ... 114
Cases relieved, ... 68
Cases not relieved, ... 8
Cases not heard from, ... 20
Total Cases, 210

(aa) *Facial Neuralgia.*

Of facial neuralgia we have 37 in 129 cases. No subdivision is made into supra and infra-orbital, mental neuralgia, &c. Suffice it to say, that *facial neuralgia*, in its various forms, involving any of the branches of the fifth pair of nerves, or the *portio-dura* of the seventh, or both, is the most excellent field wherein to test the value of this method. The nerve-branches, in emerging from the supra, infra, or mental foramen, becoming nearly superficial, the painful point is easily ascertained, and the seat of pain reached. When once discovered (the surface affected is often very limited), the injection may be freely thrown even into the foramen.

CASE I. (Dr. Wood's.)—A lady, the wife of a medical man, was suffering from very intense neuralgia of the forehead, which had lasted, at irregular intervals, for ten days. The pain was so severe that it rendered her completely useless. I at once inserted the needle; the pain became instantly relieved, and soon left entirely. Since then it has never returned.*

CASE II. (Mr. Hunter's.)—*Tic Douloureux of four years standing.*—S. G., aged 55, had been constantly subject to tic douloureux for four years, with but little intermission: at one time he obtained for a few weeks from seven to eight hours' sleep at night, but with that exception he used always to be in pain day and night, and seldom slept an hour without a violent paroxysm. He was suffering these repeated violent attacks of pain all over the left side of the face, which extremely and almost constantly distorted him, and caused him day and night to keep up a cry of anguish. All remedies failed. About one grain and one third of the acetate of morphia was injected at 8, P.M. The man fell asleep very soon after, and continued to sleep for seven hours. This injection was repeated for several days, and thereby

* Brit. Med. Journal, Aug. 28, 1858, p. 721.

the constant recurrence of the attack of pain was put an end to, and the paroxysms, when they did occur, were far milder.*

CASE III. (Mr. Burns's.)—The patient, Mrs. ——, aged 38 years, had been suffering for years with severe attacks from neuralgia, above the right eye, extending over the temporal region of same side. Exhausted all ordinary remedies, and finally used an injection composed of equal parts of tincture of opium and hyoscyamus. The result was all that could have been wished for. Till now she has been free from neuralgic pains.†

CASE IV. (Mr. T. F. Spender's.)—A lady, of about 50, had for many years past suffered from paroxysmal attacks of neuralgia in the upper maxillary nerve. All other means failed to give relief. Injected at once 15 drops of the officinal solution of acetate of morphia. Next day, patient had slept for six hours, with almost complete relief from pain. Complete recovery took place; and it is to be remarked, that in this case the administration of narcotics in the ordinary way had only stupefied the sensorium, without in any way reducing the local hyperæsthesia.‡

The remaining cases of facial neuralgia occurred in my own practice, four of which were reported by me in the *Boston Medical and Surgical Journal*, of April, 1860; but I am now enabled to bring down their progress and result to May, 1862.

CASE V. *Neuralgia of the Trifacial, of* 13 *years standing.* —Mrs. W——, of Malden, aged 30, mother of one child, was first seen February, 1859. Suffered from facial neuralgia for the last 13 years. Both her mother and sister are subject to the same disease. It has invaded the head, neck, shoulders and arms. A miscarriage two years ago ag-

* Med. Times and Gazette, Oct. 16, 1858, p. 4058.
† Med. Times and Gazette, Oct., 1858, p. 409.
‡ Brit. Med Jour., June, 1860, p. 437.

gravated her suffering. No remedies proved successful, and as a last resort she had all the teeth of her lower jaw extracted, without relieving the neuralgia.

Subcutaneous injection was tried at the infra-orbital foramen, to the extent of a third of a grain of morphia for the first injection. The result—minus severe stomachic disturbance — was all that could be desired. For two months she was almost entirely free from pain. At that time the injection was repeated, owing to severe shooting pain in the arms and legs. No return of pain after the operation; and under the constant use of tonics and proper hygienic treatment, the patient rapidly recovered her strength, and continued well in May, 1862.

CASE VI. *Neuralgia seated in the right Temple.*—Mr. ——, residing in Boston, aged 20, book keeper, was attacked, two weeks previous to consulting me, with violent pain in the right temple, during the night. Always enjoyed good health, but is of nervo-sanguineous temperament. Can assign no cause for the pain. Used palliatives and external applications without success.

I injected ten drops of a strong solution at the *temporo-malar point.* Shortly after, complained of giddiness, but declared himself free from pain, which was very violent when he entered my office. Went to sleep for an hour. Had no pain when he left me. Patient took tonics for a considerable period afterwards. Pain has not returned, up to the present time.

CASE VII. *Neuralgia of the Supra-Orbital Branch.*—Mr. L——, aged 28, merchant, has suffered for several weeks from severe pain situated at and about the *supra-orbital foramen;* is hardly ever free from pain; worse at night; sometimes experiences sharp pain at the *pes anserinus.* I injected one sixth of a grain of acetate of morphia near the foramen. Felt relieved for several hours, but pain returned next morning. Injected one quarter of a grain of the same, in the

same position. Four days later, repeated the operation, after which the pain did not return. Have not heard from the patient since 1860, in the spring.

CASE VIII. *Tic Douloureux of the right side of the Face.* —Mr. H——, fruit vender on State Street, 35 years old, married, suffers from a severe attack of tic douloureux in consequence of exposure at his occupation in the open air. The pain has harassed him for the last two weeks. Injection at the *infra-orbital point* for three consecutive days. Received each time decided relief from the operation.

CASE IX. *Neuralgia in the left Temple.*—June 25th, 1860, I saw Mrs. ——, feeble, and in consumption, who had been troubled for about five months with excruciating pain in the left temple. Injected ten drops of the solution, with favorable result, but causing considerable gastric disturbance. Operation was not repeated, as I lost sight of the patient.

CASE X. In December, 1860, I saw Miss K——, of Boston, who had been subject to facial neuralgia for over twenty years. All ordinary means of relief had failed, and her general health is much impaired in consequence of her sufferings. Pain is situated directly in the course of the *infra-orbital* branch of the *tri-facial.*

Injected a weak solution near the *infra-orbital foramen,* with favorable result as far as the pain was concerned, but causing considerable gastric disturbance. Pain returned, though not so severely as before. Repeated the injection several times at intervals, always with favorable results. The patient was advised to take also the following tonic: ℞. Liquor-potassæ arsenitis, ʒ iss.; tinct. cinchonæ, ʒ iii.; syrupi aurantii, ʒ i. M.; cochl. parv. 3 t. p. d. Under the persistent use of tonics and an occasional injection, patient continued to improve, and says she has not been so comfortable for many years as of late. Though the neuralgia still troubles her slightly from time to time, yet she is able to

work, and has gained strength sufficient to consider herself quite well.

CASE XI. Mr. ——, employed on the Providence Railroad, was seized suddenly with violent neuralgic pain at the *supra-orbital foramen*, after standing in the wind and rain for some time. I had prescribed for him before for some other trouble, so he called at once upon me. Judging it to be a genuine case of neuralgia of recent date, I injected eight drops of the solution, with success. The pain did not return.

CASE XII. In January last I saw at the United States Hotel of this city, Mr. G——, who had been under the care of a homœo-quack for over a week, for the purpose of curing a severe attack of supra-orbital neuralgia. Cause, severe mental application and the too free indulgence of tobacco. Bowels inactive, and the digestive functions disordered. I enjoined absolute rest, prescribed a cathartic pill, to be followed in the morning by a saline draught and pil. morphiæ valerianatis, one tenth of a grain each to be taken every two hours during the night till pain ceased. Three pills were sufficient, and patient passed a tolerably quiet night. Cathartic operated well. In the morning I found him much better, but still now and then having a severe paroxysm of pain. Injected three drops of the solution at the *supra-orbital point*, with decided benefit. Under the use of medicines appropriate to the state of his system, Mr. G. improved rapidly, and about six days from the time I saw him first, he was again able to attend to his official duties at the State House. The pain has not returned since.

(bb) *Hemicrania.*

CASE XIII. (Dr. Knight's.*) Mrs. A. B., a widow lady, æt. 52, has been subject to periodic headache for several years. The attacks recur every fortnight or three weeks, and

* On a new Method of treating Neuralgia, by Dr. A. Wood. Edinb. 1855.

commence with pain in the nerves of the integument at the external angle of the right orbit, and in the posterior branch of the second cervical nerve of the right side. After from four to six hours, during which time all the nerves of the right side of the scalp become severely affected, the pain either ceases altogether, or passes to the other side of the head and runs a similar course. At the commencement of a later attack, the injection of twenty drops of Battley's solution into the cellular tissue around each of the starting points of the pain before mentioned, was attended with entire relief for several hours.

(cc) *Cervico-Brachial Neuralgia.*

CASE XIV. (Dr. Wood's.) Miss ——, an old lady, who had long labored under gastric and nervous symptoms, had suffered severely for four days from cervico-brachial neuralgia. Is unable to take opium. The usual internal remedies had been tried, but without the least alleviation of her agony. Having ascertained that the most tender spot was the *post clavicular point* of Valleix, I inserted the syringe within the angle formed by the clavicle and acromion, and injected twenty drops of a solution of muriate of morphia. She complained soon of giddiness and confusion of ideas; in half an hour the pain had subsided, and I left her in the anticipation of a refreshing sleep.

Next day, at 11, A.M., found her still asleep. Under the use of somewhat energetic stimuli, however, these symptoms disappeared, and from that time to this the neuralgia has not returned.*

CASE XV. The following case, which occurred in my own practice, is of sufficient interest. Mr. ——, German, 46 years of age, carpenter by trade, has suffered for many years from severe lancinating pain in his left arm, which he

* Op. cit., p. 7.

fractured, at the upper third of the humerus, when 12 years old. Pain is sometimes sharp and lancinating, sometimes it partakes of a dull and heavy character. It shoots along the neck, from whence it starts, downwards, is felt all over the shoulder, and is often most severe at the external angle of the clavicle, at its articulation with the scapula. I injected twenty drops of the solution. In about half an hour after the instrument was withdrawn, the patient felt sleepy. No nausea or vomiting. When he awoke, declared himself free from pain. Some weeks after, the pain returned with increased violence; fifteen drops were injected. The same phenomena and the same results followed. This happened in March, 1859. From then till now, in cold, wet and damp weather, he has occasional and very slight pains, which he says are not worth noticing when compared with his former suffering.

(dd) *Intercostal Neuralgia.*

This is a very interesting class of cases. Its particular symptom is some pain about the mammary region and the intercostal spaces. Young women are particularly subject to it, when suffering from menstrual irregularities. The most painful point is found on the outside of the spinous process of the vertebræ, or along the lower margin of the rib.

Of 13 cases I have been able to collect, 12 are reported by Dr. Béhier.* Of these, 9 cases of uncomplicated intercostal neuralgia, and 2 cases which existed in consumptive subjects, all were cured by *one single injection*, on a level with the intercostal space, which was the seat of the pain. The remaining case, complicated with strange symptoms, was also relieved, but not cured.

Case XVI. Mr. G——, of Boston, 36 years, master of

* Championniere's Journal, Art. 5680.

a ship, consulted me about a severe pain in his left side, situated exactly along the lower margin of the 7th rib. Is subject to rheumatism, and whenever that complaint leaves him, he suffers from pain in the side. Has been blistered, &c., with no good result. I gave him a trial with the syringe, and injected 15 drops of the solution, with beneficial results for about a week, when the pain returned, and the injection was repeated, 25 drops at the time. For three weeks after this operation the pain did not return, when Mr. G. went to sea again, and since that period I have not heard from him. I saw him last in the spring of 1861.

(ee) *Pleurodynia.*

Four cases also occurred in the practice of Dr. Béhier. In all these patients, treated at the consultation by injections of sulphate of atropia, the improvement consequent on each injection was not doubtful, but these individuals are reported as having been lost sight of.

(ff) *Lumbo-Abdominal Neuralgia.*

Case XVII. (Dr. Wood's.*) Miss ——, aged about 50, very stout, suffered from a uterine affection, accompanied with severe lumbo-abdominal neuralgia. The pain she suffered was great, and the lameness it occasioned entirely precluded the possibility of walking. Attention was directed first to the uterine symptoms, hoping that the neuralgia would disappear spontaneously. This, however, resulted in disappointment. The pain evinced little or no disposition to abate. On the 2d of June, 1854, 30 drops of Battley's solution were inserted. Severe vomiting followed, and the pain was entirely diminished. Constitutional treatment did not decrease the severity of the pain; 30 drops were again injected on the 13th of December, 1854.

* Op. cit., page 11.

Dec. 14th, pain on left side nearly gone; that on the right very bad.

Dec. 16th. Repeated the injection on the right side.

Dec. 17th. Pain much relieved.

The lady was seen again on the 29th of December. Pain was much easier, but she still continued lame, and the pain was apt to increase after exertion.

(gg) *Sciatica.*

Fifty-five, or almost one half of all the cases of neuralgia, come under this division. The complaint is not only met with very frequently in practice, but is also the most favorable form of neuralgia to test the value of subcutaneous injection. I give a few select cases of other physicians, as well as some of my own.

Case XVIII. (Dr. Wood's.) Mr. ——, aged about 50, after much exposure to wet, consulted me on the 4th of June, 1857, on account of a severe attack of sciatica. I prescribed a smart dose of calomel and rhubarb, to be followed by an antimonial mixture, and on the evening of the following day, injected 20 drops of Battley's sedative solution. Four hours afterwards he fell into a deep sleep, and wakened free from pain.*

Case XIX. (Dr. Hunter's.) Henry Smith was admitted under the care of Dr. Page, on September 29th, 1858, into St. George's Hospital, on account of sciatica. November 2d, all measures of treatment were suspended, no improvement having been obtained. Next day, three-fourths of a grain of acetate of morphia was injected into the cellular tissue of the lower border of the buttock. Three quarters of an hour afterwards he was warm and very comfortable. The injections were practised five times altoge-

---

* Op. cit., page 11.

ther, from the 3d of November, and on the 10th of the same month he went out from the hospital quite cured.*

CASE XX. (Dr. Cowdell's.) W. S., aged 38, laborer, admitted February 9th, 1860, with sciatica on the right side, which had existed since October, 1859. He walked, or rather limped into the ward with both hands resting on a stick between his legs, dragging his right leg after him. Pain was increased by pressure over the nerve, from the lower border of the glutæus maximus muscle to the popliteal space. Ordered the atropine injection at bed-time, and a mixture of iodide of potassium.

10th. The injection last night removed the pain; only an ache is experienced to-day, instead of the shooting pain of yesterday. Repeat injection in the same place. 11th.—Feels no pain or soreness whatever in the hip. Pressure even into the sciatic notch gives no pain; and he can walk with as much freedom and ease as before the attack. He was discharged well on the 16th, seven days after admission.†

CASE XXI. (Dr. Fuller's.) Henry South, a laborer, æt. 29, was admitted into King's Ward at St. George's Hospital, on the 29th of September, 1858, suffering from sciatica of the left side. The pain, which was of six months' duration, extended from the hip down the thigh and leg. It was of a dull, wearing character, but was much increased by motion, and by every act of straining, as in coughing, sneezing, and the like. On the 30th of October, as no benefit resulted from treatment, all medicines were omitted. On the 3d of November, Mr. A. Hunter injected three quarters of a grain of the acetate of morphia at the lower border of the left buttock. Patient was much relieved. In short, five injections were found sufficient to subdue the pain, and he

* British Medical Journal, Jan. 8th, 1859.

† Med. Times and Gazette, March 17, 1860, p. 267.

left the hospital on the 10th, free from uneasiness, and able to walk comfortably. No sickness or discomfort was produced, except after the first injection.*

Dr. Béhier, physician of the Hôpital Beaujon, reported, in the *Gazette des Hôpitaux*, 18 cases of sciatica, of which 12 have been cured by this mode of treatment.

I select the following from notes of my own cases.

CASE XXII. *Sciatica of three and a half years' standing; Injection in the course of the Sciatic Nerve; Relief.*—Mrs. ——, aged 26, of nervous temperament, but strong constitution, aborted six years ago; since that time her health has been impaired. Five years ago she was attacked with severe pain in the right sciatic nerve, starting from the ilium and shooting down the thigh to the knee. Saw her in November, 1859. Examination reveals tenderness of the whole right hip, and a painful point was felt upon pressure near the posterior superior spinous process of the ilium.

Subcutaneous injection was twice practised in her case by me, with good results—the patient being each time relieved for a considerable period. Under the use of tonics she continued doing well, and she suffers but seldom from pain in the hip or limb.

CASE XXIII. *Sciatica of about six months' standing; Relief.*—Mr. E——, aged 36, merchant, of feeble constitution, and troubled with disease of the kidneys, applied to me, suffering from a severe attack of sciatica, which confined him to his bed. Pain is situated at the outer, lower portion of the thigh, and also in the knee. Is very nervous, and can bear pain very ill. Pulse 110, skin hot, appetite poor. Ordered a brisk cathartic and sedative pill.

Towards evening, the pain continuing to be severe, I injected 20 drops of the solution. The operation was painful; no gastric disturbance followed, and in about three

* Dr. H. W. Fuller on Rheumatism, Gout and Sciatica. London, 1860.

quarters of an hour after, the patient was asleep. Passed a good night, but in the morning pain returned. Repeated the injection on three successive days, and I had the satisfaction to see my friend comfortable, and in a week from the commencement of the attack, to see him return to his business. Has had no return of the pain.

CASE XXIV. Mr. R——, mechanic, aged 42, has suffered for more than a year from severe pain in the course of the right sciatic nerve, beginning about two inches below the hip-joint and extending down to the knee. Is hardly ever free from pain; and cold and wet weather aggravates it still more. Has used every remedy. After administering a cathartic the day before, I injected 25 drops of the solution into the thigh, with good result. The patient was free from pain for several days; and when he had a renewed attack, I injected 35 drops, and later 45 drops, after which the pain did not return again. No gastric disturbance.

CASE XXV. May 7th, 1860, I saw in consultation a gentleman, aged 68, who has for years been subject, at times, to severe, persistent pain in the left hip and limb, felt only when he attempted to rise from a chair or sofa, and never causing any trouble when sitting quietly. Complains also of great weakness in the limb. The case presents more the characteristics of confirmed chronic rheumatism, with great loss of strength, than those of sciatica. As everything had been tried, it was proposed to essay subcutaneous injection, for which purpose I was called.

May 7th. Injected one eighth of a grain of sulphate of morphia; patient felt somewhat drowsy, but declared himself free from pain, and went to sleep. Left him in that condition.

May 8th. Has passed a comfortable night. Can move about with more ease, but still feels an uneasy sensation in the limb. Repeat the injection.

May 9th. Reports free from pain.

May 10th. Pain returned; injected one quarter of a grain of morphia.

Free from pain for several days. Repeated the operation once more, with benefit.

Some weeks later I received a very handsome note of acknowledgment from this gentleman, in which he expressed his satisfaction of the treatment, and the benefit he had derived from it.

CASE XXVI. Mr. A——, aged about 60, a retired merchant, of good constitution, slightly nervous temperament, and very stout, had been confined to bed by a severe attack of sciatica of the left side, for about three weeks, when I was asked to see him in consultation with the attending physician. This was not the first attack. Twice before he had suffered from the same disease, which then yielded under the use of quinia and local remedies, such as cupping, leeches, and the application of morphia to the blistered surface. But this attack seemed to defy all these formerly successful remedial agents, and the patient has been more or less in constant pain. Pulse 100, bowels regular, appetite good.

August 30th, 7½, P.M. Injected 15 drops of Squibb's fluid extract of opium near the great trochanter of the femur, where the patient complained most of pain, shooting from thence down to the knee and along the outer side of the leg into the foot.

9½, P.M. Called again with the attending physician, and found the patient resting comfortably on the left or painful side and free from pain. Nothing farther was done.

Aug. 31st, 8, A.M. Patient passed a comfortable night; slept without the use of Dover's powder, and complains of but very slight pain. Repeated the injection; omitted all medicine.

Sept. 1st and 2d. Free from pain, and no injection needed for two days. Sleeps better, and can turn over in bed without much trouble.

Sept. 3d. Made an attempt to stand, but found it impossible; the weight and motion give pain. Can, however, be placed in one of Eliar's extension chairs. Repeat the injection at night.

Sept. 4th. Rested well; no pain in the thigh, but complains of a constant prickly sensation in the leg and foot. Foot is considerably swollen around the instep and ankle, and quite painful to the touch. Order the application of equal parts of Tinct. iodini comp. and ether. sulphur.

Oct. 1st. Patient continued steadily to improve, from day to day, and is, at the date of this report, able to walk about quite freely, though mostly with the aid of his cane. Goes out daily.

Oct. 12th. Patient, whilst in the act of stepping into his carriage, slipped and fell heavily upon the sidewalk, sustaining a severe contusion of the hip. The pain in the course of the sciatic nerve returned with renewed violence. External applications were ordered to the hip, and the injection repeated (15 drops) at the most painful point. Passed a comfortable night. Being mostly free from pain during the day, the injection was resorted to for some time, late in the evening, always ensuring a good night's rest. Recovery was complete in a short time.

During the cold of the winter, Mr. A. had a renewed slight attack of sciatica, which, however, was promptly checked by a resort to hypodermic injections, and for the last four months he has been gaining strength, and continues to be perfectly well up to the present.

(b) *Cases of General Disorders of the Nervous System.*

Of the diseases in which the disturbance is general instead of local, where the nerve-centres are affected rather than any particular branch of a nerve, and in the treatment of which hypodermic injection has been employed, I have been able to collect 60 cases. This number would, no doubt,

be considerably increased, had we any particulars of the 21 cases of Dr. Becquerel, reported in Championniere's Journal. Nothing, however, being stated, except the number of cases treated, viz., 21, of which 20 were cured and 1 relieved, I have omitted the same altogether. I detail, however, some other very interesting cases.

(aa) *Pains sympathetic of Cancer in Utero.*

CASE XXVII. (Dr. Béhier's.) Ten drops of a solution of sulphate of morphia were injected each into the anterior part of the thighs, in a woman attacked with cancer of the womb, and who suffered much from the sympathetic pains so commonly observed in similar cases; the pain ceased, and did not return.*

(bb) *Rheumatic Muscular Pain.*

Fifteen cases are reported.

CASE XXVIII. (Dr. Cowdell's.) H. P., aged 25, was admitted into Dorset County Hospital with chronic rheumatism, December 1st, 1859. He was somewhat relieved by the use of guaiacum and iodide of potassium, which was continued until January 12th, 1860, when, complaining of an additional pain in the lumbar region which caused him to walk with his hands on his knees, the atropine injection was used.

Jan. 13th. The pain in the back was greatly relieved last night by the injection. Omit omn. meda. ℞ Syr. ferri iodid. ʒ ii. ter die.

15th. Very much better; no pain in back; can walk quite erect; has a pain in the tensor vaginæ femoris muscle. Inject. repet.

17th. Pain gone from the tensor vaginæ femoris muscle, but experiences slight pain in the gracilis and inner hamstrings. Repet. inject.

---

* Championniere's Journal, Art. 5680, p. 387.

26th. Feels well and able to work; no pain whatever; says he is cured by the injections. Discharged well.*

Dr. Béhier reports *eleven cases* of rheumatic pain treated similarly.

Dr. Hérard, speaking of his cases — among 10 of which there were 3 of rheumatism — in the *Union Médicale*, says: "Relief followed always, except in a case of contusion; but most of the cases required several injections in the course of a few days. The result was most evident and surprising."

(cc) *Tetanus.*

The experiments made on tetanic patients are highly important and interesting. I give the history of the only four cases reported.

CASE XXIX. *Dr. Dupuy's Case of Traumatic Tetanus treated with success by Hypodermic Injection of Sulphate of Atropia.*† The patient was a young man who had suffered a comminuted fracture of the index finger, followed by tetanus. Extr. of belladon. was administered without any appreciable effect, and the tincture was equally unsuccessful. The surgeons in attendance removed the splinters of bone under the use of anæsthetics; but on awaking, the patient was more agitated than before; the jaws could scarcely be opened, and the trunk rested only upon the occiput and the pelvis. The dose of extr. of belladon. was doubled, but without apparent effect. As the disease was still advancing, and the means hitherto employed were unsuccessful, it was determined to inject with sulphate of atropia. Twenty-five minims of a solution were injected by means of a syringe into the subcutaneous tissue of the *lumbar region*. At the end of a quarter of an hour, there were symptoms of

* Braithwaite's Retrospect, Part 41, p. 60.

† Vide Gazette Medicale de Lyon, May, 1860, and British and Foreign Medico-Chirurgical Review, for October, 1860, Cap. Therapeutical Record, p. 559.

poisoning by belladonna, the agitation of the patient being so great that two persons could scarcely restrain him. This state continued for some time, after which he fell asleep for three hours. The stiffness of the lower limbs then diminished, and the patient could bend his knees, but the opisthotonos and trismus remained. Another injection was performed in the lumbar region, and was also followed by symptoms of poisoning. The patient afterwards slept for five hours, and from this time the symptoms gradually diminished—the wound being dressed with a pomade containing belladonna. It is remarked as an extraordinary fact, that belladonna, administered by the stomach in a full dose, produced no effect, while the same medicine introduced into the economy by subcutaneous injection, produced a rapidly curative action.

CASE XXX. *Dr. Fournier's Case of Traumatic Tetanus treated successfully by the Injection of Sulphate of Atrophine.** —Dr. Fournier, surgeon to Hôtel-Dieu de Soissons (Aisne), reports: "In the presence of two contradictory, published facts, the first in the *Gazette des Hôpitaux*, for July 7th—Traumatic tetanus treated without success by belladonna; the second in the *Revue de Thérapeutique Médico-Chirurgicale*, of August 5th, 1860—Tetanus cured by the injections of Atrophine—I believe it to be my duty to break the silence which I had imposed upon myself, until new facts should have confirmed the observations which I present to-day.

"During the month of April last, I had among my patients at the Hôtel Dieu, a female patient, occupying bed No. 5 of the ward St. Bartholomew. This woman had been run over by a carriage, and the wheel passing over the internal border of the left foot, had laid bare the entire bone, the muscles, &c. being torn. After the lapse of several days, a

* Gazette des Hôpitaux Civiles et Militaires, Jeudi, 20 September, 1860.

cicatrix commenced to form; but at the same time severe pain manifested itself along the whole limb, and the patient soon presented unmistakable symptoms of tetanus. Antispasmodics (opium, musk, camphor, chloroform, &c.) were employed, but without success. The severity of the symptoms increased, and, three days after their first appearance, I observed rigidity of the muscles of the back, and opisthotonos, very marked, did not delay to manifest itself soon.

"I then resorted to subcutaneous injection, and introduced, by means of the syringe of Pravay, 20 drops of a solution of sulphate of atrophine (6 grains to the ounce of water) into the neck; I renewed this injection in the afternoon. Slight symptoms of intoxication showed themselves, and the following day, at my visit, I noticed an amelioration of the tetanic symptoms. The treatment was repeated, and 40 drops injected at the same point.

"Symptoms of intoxication again manifested themselves as before, and more particularly dryness of the lips, tongue and throat, hallucinations, &c. After a few hours, these symptoms disappeared, and the patient improved from day to day. She left the hospital, cured."

CASE XXXII. (Dr. Hunter's.*) W. D., aged 60, was admitted into St. George's Hospital, Nov. 5th, 1858, with a gun-shot wound of the thigh. On the 13th, he had a little wandering delirium; on the 14th, trismus and other symptoms of tetanus supervened, and gradually increased during the two following days.

16th. Has had no good sleep since the spasms came on. At half past twelve, three quarters of a grain were injected in five drops of liquid; he was asleep in 25 minutes, and remained asleep for the greater part of the night, totally undisturbed by the tetanic spasms, which recurred nearly every minute the whole time he was asleep. The progress

* Med. Times and Gazette, March 5th, 1859, pp. 234, 387.

of the case did not appear to be affected by the treatment, which certainly procured sleep, but had no effect upon the spasms, from which death finally resulted.

CASE XXXIII. (Dr. Read's.) This case, the first of its kind, viz., "traumatic tetanus," in which hypodermic injection has been employed in this city, if not on this continent, has been reported at length in the *Boston Medical and Surgical Journal* of Jan. 10th, 1861 (Vol. 63), by Dr. Read. All those interested in this subject will do well to study his paper. Although death followed on the fourth day after the accident, it is not saying too much in praise of subcutaneous injection if I state summarily, that the effect of the operations which I performed, at the request of Dr. Read, upon his patient at different periods during two days, was such as to warrant a repeated trial of the same treatment in similar cases, with more than an average chance of success.

(dd) *Delirium Tremens.*

CASE XXXIV. (Mr. Hunter's.) E. H., aged 30, was admitted on November 2d, with delirium tremens. An emetic was given, and he was treated with 40 drops of tinct. opii every other hour during the day. Slept a little during that night, but was as bad as ever next day. After the night of the 2d, he did not sleep for two days and nights, and was so excited that the strait waistcoat was found necessary. Morphia had been repeatedly given in half-grain doses by the mouth, but without producing sleep. At 3, P.M., on Nov. 5th, half a grain of morphia was injected into the cellular tissue of the neck. At the time of the injection he was quiet, but sleepless; the tongue was tremulous; he could talk rationally. Ten minutes after the dose, he was in the same state; eyes open; he was sleepless. Fifteen minutes after the injection, the eyes were occasionally shut, and when open, looked sleepy. One hour afterwards, the eyes were frequently closed; he seemed quiet, and inclined

to sleep; and in two hours he was comfortably asleep, and continued so for five hours and a half. He then had some wakeful intervals, but again went to sleep for five hours, and afterwards continued dozing throughout the night. On Nov. 6th, he was much quieter than he had been the previous day; the pulse was 80; the skin perspiring. At a quarter to 9, P.M., the same dose was again injected. He was found, three quarters of an hour afterwards, fast asleep, and continued so for nine hours. On Nov. 7th, he was far more quiet and rational. The injection was repeated in the evening; but on the following evening he was found asleep. No further symptoms occurred, and he was discharged, cured, a few days afterwards.*

CASE XXXV. This case and the following I select from my own note-book.

Mr. B——, æt. 26, of small stature but strong and well built, a German mechanic, presented unmistakable symptoms of delirium tremens, when I was sent for to see him, May 12th, 1860. After an attempt to quiet him by means of medicine, which proved futile, I injected three quarters of a grain of morphia into the cellular tissue of the arm. Twenty minutes after the operation, the patient sunk into a slumber which was not broken for an hour and a half. This was at 11, A.M. At 4, P.M., when I saw him again, he was rather noisy, but more easily persuaded to keep quiet than in the morning. I injected again one grain of morphia, and in less than half an hour patient was asleep. Next morning, May 13th, at 8, A.M., I learned that he had slept well during the night, without hardly ever awakening, and found him calm and cheerful; talked rationally, and said he felt weak, but like himself again. The operation was not repeated, and in five days after he was at work again.

---

* British Med. Journal, Jan. 8th, 1859, p. 19.

CASE XXXVI. Mr. St. ——, German, æt. 34, of nervous temperament, addicted to drinking, had suffered from an attack of delirium tremens for two days, when I was called to see him. This was the third time he had had the disease. For two days the delirium was on the increase. Persuasion was useless, as I soon saw, to get him to bed; he declared it to be on fire. I at once dissolved one grain of morphia, and injected it into the thigh before he was aware of what was going on. Refused to let me feel his pulse; but after about fifteen minutes he complained of fatigue in his limbs, and said they felt as if going to sleep. Without making any resistance, he was laid on his bed, half closed the eyelids and dozed away. He made another attempt to get up, but soon sleep overpowered him.

6, P.M. Slept for nearly three hours, but is noisy again. Repeat injection.

9, A.M. Find patient calm, but very weak; pulse 108; no appetite. Slept almost the whole forenoon.

In the course of a week this patient recovered so far as to be out, and in another week's time he followed his usual avocation.

(ee) *Chorea.*

CASE XXXVII. (Dr. Page's case, reported by Mr. Hunter.) Mary D., æt. 16, was admitted to St. George's Hospital in a frightful state of chorea, all the muscles of the body being perpetually in action.

Dec. 7th. Still the same, no treatment doing any good. The chorea was constant, day and night, and the movements were so violent that she could hardly at times be kept in bed. Very much emaciated; sordes were beginning to collect about the lips; she had not slept for three days or nights; and it seemed now that if sleep was not procured she must die of exhaustion. At 11, P.M., the movements of the arms being for a moment restrained, one third of a grain of mor-

phia was injected into the cellular tissue of the neck near the clavicle. From that moment the violence of the spasms gradually abated, and in fifteen minutes she was in a sound sleep and snoring. The chorea completely stopped, the moment she slept. In three quarters of an hour she awoke, and was then as bad as before. At 2½, A.M., half a grain of morphia was injected; muscular action quieted instantly; she was dozing in two, and slept in four minutes; she continued to sleep three hours.

On December 8th, the chorea was as bad as ever. Sordes about the lips increased; pulse very weak. One third of a grain of morphia was injected in the evening; she dozed in seven minutes and had a little sleep, and the spasms were quiet for half an hour after it. At 1, A.M., another half grain was injected, and, as in the preceding night, she was asleep in four minutes, and did not wake for six hours and a half. After the 8th, it was found that the introduction of half a grain of morphia into the arm would always and instantly quiet the spasms for several hours; and three quarter grain doses would give her sleep. For a few days she considerably improved, evidently owing to the sleep she obtained and the cessation and quieting of the spasms; but she died ultimately from exhaustion, and the formation of foul abscesses in the cheek and throat.*

(ff) *Puerperal Convulsions.*

CASE XXXVIII. (Prof. Scanzoni's.) Prof. Scanzoni, of Wurtzburg, has employed this method with success in numerous cases of neuralgia, hyperæsthesia, &c., but he attaches especial importance to the following case of puerperal convulsions, because it seems to prove, in accordance with the views laid down by Hunter, that the subcutaneous application of narcotic agents furnishes a means of acting on abnormal irritations of the brain with greater rapidity and

* Braithwaite's Retrospect, Part 39, p. 59 et seq.

certainty than the administration of the same remedies by the mouth.

D., æt. 21, primipara, strong and robust, was brought into the lying-in ward at a quarter to 8 o'clock on the morning of June 8th, 1859. Labor had commenced in the night, and she had been seized with nervous paroxysms and loss of consciousness; no account was given of the nature of the attacks; the patient remembered nothing of what had occurred during the night. The whole body, and especially the lower extremities, were œdematous; on the right side the tongue showed marks of being bitten by the teeth; the uterus corresponded to the pit of the stomach, and seemed sufficiently consistent; sounds of the fœtal heart distinct. On examination, the os uteri was dilated to the size of a sixpence, the bag of waters was partly formed, and the head presented; the urine was very albuminous. At 8 o'clock she was seized with a second convulsive attack, which was of a very marked character, and lasted for some minutes. On recovering consciousness, she could answer questions, although slowly. A third attack succeeded at a quarter to nine, a fourth at a quarter to ten, a fifth at a quarter to twelve, and a sixth at five o'clock—the last the most violent. After the fourth paroxysm, consciousness did not return, and the breathing became stertorous. At 10 o'clock she was bled to about 8 ounces; one enema, with 25 drops of tinct. opii, was given, the body was put into a warm bath, while cold irrigation was applied to the head. As opium could not be administered internally, a solution of the meconate of morphia was now at three different times injected under the skin, the quantity amounting in all to about 10 grains (75 centigrammes) of opium. The labor advanced very slowly; at 3 o'clock, A.M., the membranes burst, and at 7 o'clock, A.M., the child was born by the aid of forceps. The woman left the hospital June 21st, well."*

* Bull. Gén. de Thérap. and Edinb. Med. Journal, May, 1860, p. 1045.

The results in this case are most satisfactory. After three injections, there occurred only two attacks in nine hours, while previously there had been three attacks in an hour and three quarters. This diminution of the convulsions after the injections is so much the more remarkable, since experience has shown that, as a general rule, the paroxysms become not only more violent, but follow at shorter intervals as the labor advances. And although the author does not imagine that he has discovered in subcutaneous injection an infallible panacea for this dreadful malady, he is of opinion that the case given should induce physicians to give this means a trial.*

(gg) *Paralysis.*

Drs. Béhier and Hérard, of France, have, thus far, alone published their experiments in treating paralysis by the injection of a solution of sulphate of strychnia. Of the seven cases reported by Dr. Béhier, the *Gazette des Hôpitaux*, in support of this therapeutic agent, reports several cases which seem very conclusive. The liquid used contained five grains of strychnia to one ounce of distilled water. I shall refer to three out of the seven cases.

The remaining two cases of hemiplegia occurred in the practice of Dr. Hérard, and are reported in the *Union Médicale.*

Case XXXIX. A young girl of 19 was laboring under paraplegia, with difficulty of motion and numbness of the hands, the symptoms having appeared twenty-three days after the cure of diphtheritic angina. Iron, sulphur baths and cinchona had produced no beneficial result. One hundred and four drops of a solution of sulphate of strychnia, having been injected in six operations, along the course of both ischiatic nerves, were sufficient to cure the patient after a fortnight's treatment.

* Bull. Gén. de Thérap. and Edinb. Med. Journal, May, 1860, p. 1015.

CASE XL. A patient of Mr. Frémy, in another ward of the same hospital, had been attacked, after having slept on his arm, with paralysis of the deltoid, which yielded to no treatment whatever; this patient recovered the motion of the arm in nine days, after 6 injections of 96 drops of solution of sulphate of strychnia.*

Recapitulation of the result of the Treatment of 210 *Cases.*

1. Cases cured, ...	114
2. Cases relieved, ...	68
3. Cases not relieved, ...	8
4. Cases not heard from, ...	20
Total number of cases,	210

Now deducting from the whole number of 210 cases the 20 reported by Dr. Béhier as not heard from, there remain 190 cases to be accounted for, which sum up as follows :

(a) *Cured*, 114 cases, or three-fifths of all the cases reported.

(b) *Relieved*, 68 cases, or a fraction over one-third of the whole number of cases reported.

(c) *Not relieved*, 8 cases, or only one unsuccessful case in every 24.

Or, to recapitulate, we have the following result:

(aa) Three out of every five patients were cured; that is to say, were free from pain and discharged as well, at the time the case was reported.

(bb) A fraction less than one in three patients was relieved from suffering for the time.

(cc) One out of every 24 patients did not derive any benefit at all from the treatment.

The above result is vastly in favor of the operation. But granting, even, that many cases may have been carelessly reported, and instead of having been cured ought to have been reported as only relieved, the evidence still preponde-

* Championniere's Journal, Art. 5680, p. 388.

rates in favor of the treatment. What stronger evidence could I offer in its favor? I shall now present briefly,

Thirdly, *The advantages obtained by this treatment.*

(a) *The painlessness of its application* is demonstrated by the fact, that seldom a patient complains of the pain of the operation. This is the more manifest from the short space of time in which the operation can be performed. Having exactly decided upon the point where to inject, seize the skin, pierce it obliquely, and all the suffering is terminated in two seconds or less — a sudden prick of the needle, that is all. For any other pain, the operator must be held responsible as causing unnecessary suffering.

(b) *The speediness of its action*, when compared with the action of stomachic doses, as well as medicines administered in any other form, is demonstrated by actual experiment.

Dr. Hunter* injected a few drops of water containing one-twelfth of a grain of the acetate of strychnia into the cellular tissue of a cat; in one minute it was tetanic, and in two minutes it was dead.

Half a grain of morphia was injected by the same gentleman in the subcutaneous cellular tissue of a rabbit; it was completely comatose in five minutes, and remained so for hours.†

Half a grain of morphia was injected into the arm of a girl of 16, suffering from extreme chorea of all the muscles of the body; in two minutes all the muscles had ceased their irregular movements, and in four minutes the girl was asleep.‡

In several experiments which I instituted myself on cats and rabbits, the first symptoms of the effect of the narcotic showed themselves in a very few minutes.

Much as we learn from experiments, we derive the most satisfactory proof from those cases in which the remedy has

* Medical Times and Gazette, April, 1859. † Ibid. ‡ Ibid.

been called for, tried, and proved successful. Such are the cases of which I have given the history in this paper, and others might be added to strengthen the argument.

Whether we have to deal with cerebral affections, such as delirium tremens or mania, where large quantities of narcotic medicines had failed by the stomach, or with cases of functional cerebral derangement of the milder form, manifested by wakefulness, &c., in either case the superiority of this mode of treatment over the endermic, epidermic, and stomachic methods, is shown. All these methods require longer to act, are less certain, and are apt to fail completely.

And whence this great difference? The answer is easy. Medicines taken into the stomach pass from thence en route through the portal system, before reaching the general circulation, and much of their efficacy is lost; whilst rapidity of absorption is the great advantage of hypodermic injection. It is even far superior to the administration of medicines by the tongue or by the rectum. The modus operandi of the former, resembles hypodermic injection in this particular, that the medicinal agent placed upon the tongue is immediately absorbed and carried into the general system, but is inferior to it, because if the medicinal agent tastes badly, is nauseating or bitter, or the patient being delirious refuses medicine altogether, or is unable to open the mouth or move the jaws, as in tetanus, in the case of Dr. Read, for example, we are compelled to give up in despair. The latter method, namely, that of administering medicines by the rectum, is also far inferior, inasmuch as it answers well when we wish to introduce speedily stimuli and nutriment in urgent cases, or to administer small doses of narcotics for affections of the intestinal canal, the rectum or other parts adjacent, but not in those cases where the part requiring the narcotic is supplied by the systemic circulation, and is under the influence of the cerebro-spinal nervous system.

(c) *The certainty with which the injection will act, when all other means have been exhausted or rendered useless*, is demon-

strated by such symptoms as drowsiness, giddiness, headache, sickness, feeling of constriction in the throat, often vomiting and depression; or, if the dose be large, somnolence. Nausea is one of the most usual concomitants of hypodermic injection; and, indeed, one great desideratum to be yet accomplished is, how to prevent it after injection, or at least how to stop it, as much distress is caused by it to the patient.

(d) *The amount injected and thus placed into the system is* accurately known, which it is impossible to ascertain in stomachic doses. Physicians need hardly to be reminded of the disappointment often incurred in the action of a given dose of medicine. How often it fails to accomplish the desired object exactly to the extent we wish! And why? Simply because the effect of a given dose is not equal to the quantity taken into the stomach, but equal to the quantity absorbed, which we are unable to regulate or foretell.

But by hypodermic injection we get *the whole effect of the known quantity introduced*, which we cannot be sure of getting by the other modes. Thus, for example, if we introduce beneath the skin one-sixth of a grain of morphia, the effect which follows is that of the whole one-sixth; but if we introduce the same dose of medicine by the skin, or by the stomach, or by the rectum, the effect is not that of one-sixth of the grain taken or given, but it is equal to the quantity absorbed. Hence this method is as accurate as venous injection (minus its dangers), and we are enabled to test the effect of little-known medicines, both on men and animals, and to find out the minimum and maximum dose required to produce a desired effect. This treatment may therefore be considered *a test of the exact amount* of a narcotic necessary to produce the result we seek for.

(e) *The greater benefit exerted on the local affection, by bringing the medicinal agent in direct contact with the parts involved in the disease,* is shown by the fact, that hypodermic injections not only act quicker than stomachic doses, but

they produce also a more powerful and more effective result. The cases I have adduced in this essay of all the various diseases to which the nervous system is susceptible repeatedly show, that when in many cases medicines administered by the stomach were entirely useless, and often even prejudicial, subcutaneous injection has been productive of the greatest benefit.

We often lose time and our patient continues to suffer, whilst we ponder over the name of the disease, and wait in vain for the result of the medicinal agent upon it. This loss of time is, if not detrimental, at least very unwelcome to the sufferer. In all nervous disorders, but particularly in all the forms of neuralgia, we have both a local and a general disorder—a painful point somewhere, and a general disturbance of the system. We search, therefore, for both a *local* or *topical*, and *a remote effect*, in our remedy, the former being dependent for its effect on the tissue to which it is applied; the latter dependent on physical, chemical or vital changes produced on parts at a distance from those to which the medicine is directly applied, that is, on the system at large—and in hypodermic injection we reach both of these desiderata at one and the same time.

Take, for instance, a severe case of tic douloureux. You have the pain, perhaps seated at about the infra-orbital foramen, so severe, it may be, that the patient holds his hand constantly to the face. This is the local pain. At the same time the whole nervous system is considerably affected, as is manifested by the general uneasiness, fretfulness, &c., of the patient. The operation is performed, and what is the result? In a few minutes, if not in as many seconds, the pain vanishes altogether, and the restless body revels in sweet slumber! Your patient is a victim to tetanic convulsions. You may not save him, but may at least smooth his weary road of affliction, and enable him to make his exit out of this vale of suffering in peace, and comparatively free from agonizing pain, and spare him the groans and

heart-rending expressions of torment which try the hearts of kindred and friends.

We will now consider,

Fourthly, *The disadvantages arising from this treatment.*

They may be summed up into —

(a) The power and consequent danger of the remedy if used indiscriminately.

(b) The possibility of producing local inflammation and abscess in the part repeatedly punctured.

(c) The nausea and vomiting caused sometimes by the introduction of the narcotic in this manner.

(d) The possibility of the fluid injected escaping from the puncture or wound.

(e) The pain occasioned in some positions by the introduction of the operating needle.

Are these disadvantages really such that neither time, nor care, nor experience, can overcome them? Not at all. They are already overcome, and the way to do it has already been pointed out in these pages.

None but careless impostors would venture to use such a prompt and powerful, yet perfectly safe remedy in proper hands, indiscriminately.

Local inflammation and abscess in the parts punctured are not normal, but abnormal conditions of the operation, and cannot happen if due care is exercised by the physician.

The finger pressed upon the puncture for a minute, or a piece of sticking plaster applied, precludes all possibility of an escape of the fluid injected.

The pain of the operation is such as a child could bear easily, and ought in no case to deter any one from seeking relief by this mode of treatment.

And lastly, the nausea and vomiting caused sometimes by the narcotic may be diminished by the use of very small injections in the beginning, gradually increased, and by the proper application of remedies, such as bismuth, chloroform, &c.

ARTICLE III.

THE REALITY AND CERTAINTY OF MEDICINE.

BY MORRILL WYMAN, M.D.

OF CAMBRIDGE.

READ AT THE ANNUAL MEETING, JUNE 17, 1863.*

MR. PRESIDENT AND FELLOWS OF THE MASS. MEDICAL SOCIETY:

THE return of this day of social gathering and friendly greeting almost unavoidably brings to mind those of our friends, who during the past year have been taken from their labors and duties to another sphere of activity. Twenty-three Fellows of the Society have died since our last anniversary. Some of them, at the age of fourscore, were enjoying the confidence and respect of the community in which they lived, and that inward peace which belongs to an honest man and good physician looking back upon a well-spent life. Others were in the midst of life and usefulness. Others again, full of hope and high aspirations, had just commenced the

* At an Adjourned Meeting of the Mass. Medical Society, held Oct. 3, 1860, it was

Resolved, "That the Massachusetts Medical Society hereby declares that it does not consider itself as having endorsed or censured the opinions in former published Annual Addresses, nor will it hold itself responsible for any opinions or sentiments advanced in any future similar addresses."

Resolved, "That the Committee on Publication be directed to print a statement to that effect at the commencement of each Annual Address which may hereafter be published."

work of the profession. One fourth of the number perished in the service of their country. The surgeon who ends his career in the faithful discharge of duty deserves and ever will receive the grateful homage of every true physician. Love of country excites the admiration of all; and what greater love can a man bear his country, than to lay down his life for her?

One,* yet in early manhood, an only child, inexpressibly dear to his father, a scholar, learned in his profession, his mind improved by foreign study, responded to the call of his country. Always faithful, chivalrous, dauntless, almost reckless of his life, he believed, with Baron Percy, his place of duty to be wherever a soldier fell; ready with instant aid for the wounded, he was ever in the thickest of the fight. He fell at his post. What more could we ask? He is held in grateful remembrance by his fellow soldiers who admired his humane bravery, and by his friends who knew the kindly qualities of his heart. What more could we wish?

Another,† the son of a most honored member of our Society, young, serious and thoughtful, has also fallen. Possessed of those qualities of mind and heart esteemed by all good men, peculiarly qualified for the duties of his profession, he gave himself to it in the spirit of a man who feels he must one day give an account of the lives of those committed to his care. Naturally averse to the strife and turmoil of war, he entered the army from a sense of duty.

* Samuel Foster Haven, M.D., fell at Fredericksburg, Dec. 13th, 1862.
† Robert Ware, M.D., died in Washington, N. C., April 10th, 1863.

Exact and faithful in the performance of it, he could not but gain the love and respect of all around him. Worn down by arduous service, in a beleaguered town, amid the roar of cannon, he yielded up his pure spirit, faithful to his trust, true to himself, and true to the honored name he bore.

Quantâ de spe decidit.

Notwithstanding the evidence of the self-devotion of the practitioners of the Healing Art, and of their just confidence in its results with which its history teems, and of which the past year furnishes such bright examples, those are not wanting who doubt its usefulness and the certainty of its foundations. This grows in a great measure out of a mental restlessness and tendency to scepticism, which seems to be rather a prominent feature of our times, leading to the raising of doubt and question with regard to well-received doctrines; which, because the doubters themselves cannot solve to their own satisfaction, they straitway conclude that no one else can. These discontented persons are not many, but they make up by noise and activity what they want in numbers, and soon draw together a floating class always ready to listen to the suggestions of others. They also allure those of a speculative turn, including many of the literary and in some respects more influential class, those whose studies lead them rather to a knowledge of ideas than of things, whose steps are guided not by the lamp of experience, but who, as has been said, bear about a dark lantern of theory, bright indeed within with the brilliancy of their own

speculations, but quite unfit to keep them in the path of truth. They are much inclined to be system-makers. If between a few facts they detect a similarity, it is enough for their excited imaginations, and it soon reäppears in a well-appointed theory, against all the contradictions to which they resolutely close their eyes. "I have heard," says Condillac, "of a philosopher who had the happiness of thinking that he had discovered a principle which was to explain all the wonderful phenomena of Chemistry, and who, in the ardor of his self-gratulation, hastened to communicate his discovery to a skilful chemist. The chemist had the kindness to listen to him, and then calmly told him that there was but one unfortunate circumstance for his discovery — that the chemical facts were precisely the converse of what he had supposed them to be. 'Well, then,' said the philosopher, 'have the goodness to tell me what they are, that I may explain them on my system.'" *

This unhealthy restlessness manifests itself not only in speculative matters, but in the estimate of physical truths. It is often seen "in a feverish anxiety to square the circle, trisect an angle, duplicate the cube, and detect perpetual motion," or in attacks upon the principles of astronomy. By one of these reformers its professors are charged with concealing the grossest of errors under the cloak of the higher mathematics, and building a flimsy edifice "with the calculus for stones and fluxions for mortar." A member of the Royal Society of London, who boasts

* Sir William Hamilton's Metaphysics, p. 45.

of having served in the Royal Navy for nearly forty years, and of having seen the tide rise and fall in all latitudes and under a greater variety of circumstances than Newton ever calculated, puts forth a volume to prove that the Newtonian theory of the tides is "a failure from alpha unto omega, for it will not bear the test of an impartial mathematical investigation;" and assures us that the schoolboys of another generation will laugh at the idea of the attractive power of the moon being the principal cause of the tides of the ocean.*

On the other hand, there is a class of minds always ready to accept what is new, no matter how unsupported by facts; the simple statement of a novelty has an attraction they cannot resist, and with the cry of liberality they give themselves to it with a zeal only equalled by that with which they embrace its successor. This, also, is seen not only in matters of mere speculation, and in those questions like spiritualism, which, when we have eliminated what is simple fraud, are to be explained on known principles of psychology; but also in plain practical matters, the truth of which may be settled to the satisfaction of all but this class of minds, by the most decisive experiments. Some years ago, an advertisement appeared, assuring the public that a new combination of metals had been discovered, and by its application to time-keepers, a poor marine chronometer could be made equal to the best. Many were deceived, and many chronometers sold. How

* See an interesting article on Scepticism in Science, by Prof. Lovering, Christian Examiner, 1851.

much death and disaster was the result, will probably never be ascertained. About the same time an ignorant but apparently honest master of a vessel invented a peculiar kind of quadrant, known as Hedgecock's Quadrant. With this instrument, by means of observations, as he called them, on a lighted candle, he declared that he could with great certainty determine the latitude of the place. Absurd as the whole thing was, it found friends and supporters — men who were ready to trust their property and their lives to its guidance. Vessels were actually sailed by it, and accomplished their voyages safely, as appeared by the "log-books," duly vouched. Insurance offices are said to have looked upon it with favor, two commanders of the American Navy gave in their adhesion to it, and the Director of the National Observatory at Washington saw "a gleam of truth in it," thus proving himself as shallow in science as he is false in patriotism. In fine, it attracted so much attention that it was referred to a committee of the American Academy of Arts and Sciences, who submitted it to experiment, showed it to be worthless, and the last that was heard of it was in the vituperations of the committee for its unfairness, bigotry and professional jealousy.*

If, then, the great truths of Physics cannot long remain unchallenged, if questions so absurd are raised, and claims so unfounded find supporters who are ready to risk their lives and their property on the strength of their belief, we cannot be surprised that the claims of Medicine on our confidence should

* See Appendix, Note A.

be assailed by ignorance and presumption from without, or suffer still more from scepticism and unfaithfulness within. A sceptical physician declares that he has no faith in Medicine. To such an one Barthez answered, he is right if he means his own. The physician who has no confidence in his art, and yet practises that art, can lay no claim to honesty. He should abandon it, for no one is compelled to be a physician. Such cannot receive and need not hope for success. The labors and constantly recurring self-sacrifices required of the practitioner of Medicine, can only be properly met by one who feels that he is invigorated and sustained by a well-grounded and abiding faith. It is not in the nature of man to undergo such labors and privations, if at heart he believe it is a useless mockery, that he is acting the part of humanity and leaving his suffering fellow-creatures the victims of a cunningly devised system of cheating and fraud.

Medicine is a romance, says another, of which the physician is the author. It is not worth our while to reproduce the epigrams and satires which have been heaped upon our art. They have amused the vulgar and served the end of their authors. We have little to do with mere witticisms; we are charged with relief to suffering humanity. We are to see that health, the greatest of blessings, is restored or preserved. Medicine is progressive; it must therefore be imperfect. It is pursued by keen minds and in a true spirit, but it has difficulties, peculiar to itself, which can only be overcome by patient and laborious observation and careful study.

It is in the nature of man to suffer pain as well as to enjoy pleasure; to die as well as to live. He is constantly exposed to the influence of physical agents which surround him, and to other and more subtle influences of mind. In proportion as his organs are endowed with higher functions, they are necessarily more delicate and sensitive. His sufferings are the necessary results of the laws of the animal economy. Hence it is concluded by those who have no confidence in Medicine, that its practitioners are deceived by their own vain imaginings, as to their supposed influence over disease. It is certain, they say, that many die under their hands, and it is quite as probable that those who escape owe it rather to their good fortune than to the art. Contrived by charlatanism, it is continued by the combined credulity of physician and patient. In other words, our adversaries declare that there is no reality in Medicine. Against such arguments and assertions it is in vain to array the antiquity of Medicine, the high respect in which it has been held from early times — so ancient that we know not when it was without a name and practitioners — nor even the high rank of its practitioners in learning and intelligence. Almost as much could be said for Astrology and Alchemy.*

But the question is a grave and extensive one. False or true, Medicine is connected with the greatest interests of society. It is as much the greatest of all the blessings conferred on man, if it be well founded, as health and life are the greatest of enjoyments. It is also connected with the highest princi-

* See Appendix, Note B.

ples of the physical sciences, and must be in accordance with those principles. Let us state the question as proposed by our opponents distinctly. Medicine claims the power of the prevention and cure of disease; that is, the power of producing such changes as will convert a tendency to disease, or an actual state of disease, to a state of health. This supposes in man the power not only to resist nature, but to compel her to a course the opposite to that to which she was tending; to abolish the laws of nature. But the laws of nature are invariable; hence the claims of medicine are unfounded. This is the argument brought against the very foundation of our art, stated broadly enough to meet the views of our greatest opponents.*

It is proposed to examine this question, to set forth some of the grounds of the confidence we have in the reality of medicine, and thus show that the arguments and objections just stated are unfounded.

At the very outset we are met with this reflection: If the laws of nature are invariable in the sense assumed, it is in vain to attempt or even wish to change them. But we know that these laws, or uniformities of action, are not one, but many; that each taken by itself acts in its own direction and has its own results. Action and effect in nature are usually the result of many powers combined, some aiding and some opposing, and therefore modifying each other.† Our ability to predict phenomena shows that they are invariable, and our ability to change

* See Appendix, Note B.

† Comte. Positive Philosophy, English Edition, Vol. i., p. 19.

the combinations and thus modify the results shows that the powers, entering into these combinations, are subordinated to our own. The power of man to modify them arises from his intelligence, which directs him in the combination of these laws in setting one against the other, and thus producing effects which could not take place without his intervention. To illustrate: It is a law of Physics that gravitation is in proportion to the quantity of matter; it might therefore be inferred that a man can move only a weight equal to his own. But by another law the quantity of motion is measured by the quantity of matter and its velocity; hence a force however small, may move a mass however great.

Such combinations are the sources of the wonderful power which man exercises over the globe itself. Everywhere it exhibits marks of his genius. He modifies its surface to suit his ends. Neither hill nor valley nor mountain range impedes the directness of his progress. The seas are his highway, and the winds do his bidding. The higher regions of the air and the bowels of the earth are visited for his gratification, or for the acquisition of materials for new conquests. He tames the lightnings, and they become his messengers.

But man is not content with the exercise of his intelligence upon inanimate matter, the laws of which are more simple, and its conditions permanent. He sees around him organized bodies endowed with wonderful powers of development, and forms of beauty of which he could not conceive. He perceives that the laws of their being are complex, and

that they are subject to influences which produce in them great and frequent variations; indeed, that which strikes him most, is the invariability of their tendency to variability under all favorable circumstances. The varieties are so great and so readily produced under domestication, that it is by many doubted, and by some denied, that species are anything else than varieties constantly increased by natural or artificial selection. He sees in this law the source of all the choicest productions of the garden. We have but to compare the delicious fruits which grace our tables with their wild originals, to see what wonderful changes may be produced by intelligent selection, cultivation and treatment. Who could recognize the Newtown Pippin in the crab apple, the peach and the nectarine in the almond, the plum in the sloe; or, suppose that the pear could be so modified that each month in the year should have its appropriate variety in full perfection. So thoroughly does he impress upon them their peculiarities, that they are retained for many generations, even when left to themselves, exposed to those influences which tend to bring them back to their original condition.

But he is by no means content with the exercise of his power over those plants which may conduce to his sustenance, he turns to the gratification of his taste, in the color and form of the flowers of the field. By treatment he modifies their hue, the number of their flowers, and the number of their petals, almost at will.* Indeed, whatever may be their

* See Appendix, Note C.

color, fragrance, taste, form or size, all must yield to his intelligence. Acrid and deleterious qualities must also yield and give place to those that are nutritious. And while by hygienic means he thus develops his subjects in vigor, he does not forget their diseases. Some he prevents by new combinations of plants, others he treats, and often successfully, by applications both vegetable and mineral. But, too often, wide-spread epidemics, like that of the potato and the sycamore, pass over the land and disappear, while he bitterly regrets his ignorance of their laws.

Another illustration of man's power may be found in his influence over animals, in which, inasmuch as they have voluntary motion, new relations must arise with surrounding objects, and a greater complexity of structure, accompanied by a still greater degree of variability; and mind also, by which habits are formed and qualities are developed, which so far as man is concerned, change the whole nature of the animal—habits of the body developing physical qualities requiring only the existence of their germs that man may seize upon and cultivate, increase and convert to his purposes. Whatever be the natural geographical distribution of animals, their food or their climate, they can be so modified that even the intolerance of heat by the reindeer, or of cold by the camel, has not prevented their domestication. By the law of inheritance, that like produces like, combined with habit, use and disuse, together with the selection of innate differences, and the accumulations through successive genera-

tions, what wonderful changes have been brought about and confirmed to the use of man! The ox has been increased in weight and strength and patient endurance. The horse is made to rival the ox in steady draft, or challenge our admiration for its beauty, speed and courage. The dog, the ancient, faithful friend of man, has varieties so diversified, that we can hardly believe with the naturalists that the slim and active greyhound, the slow and tenacious bull-dog, the pointer and the shepherd's dog, could all have had their origin in the wolf. The coverings of animals have been made to change their color and qualities; that of the pigeon to suit the fancy, or that of the sheep to afford a finer fabric or more complete protection against the severity of a northern climate. In fine, few animals which can live in the vicinity of man, and to which he has found it worth his while to turn his attention, have resisted or escaped his modifying influences.*

These are some of the instances, of which many more may be collected, proving the power of man over organic life. They prove it clearly and unanswerably; and this being so, we may ask those who deny the reality of medicine if it is philosophical to admit this power and at the same time to deny to man the power of influencing disease. Disease is a departure from the normal state; and to produce a return to this state the strongest agencies in nature are brought in play—those having in charge the preservation of the individual. Perhaps it would

* Darwin. Origin of the Species, p. 34.

be saying too much to claim the control of disease because we have this influence over nature; but we may fairly claim that if it can be shown, independently, that such control exists, it will be perfectly in accordance with those other powers which no one can deny. And we may also claim that the organization of nature is more in accordance with the supposition that man possesses this control, than with that which refuses it.

If it shall be said, the instances collected require long periods of time, I do not object; for if they cannot be considered analogous to those changes required in rapid disease, they can illustrate what frequently takes place in hygiene, the highest branch of medicine, the influence of which extends not only over individuals, but over whole communities, and for more than one generation.*

The evidence upon which the power of medicine is to be determined must be drawn from experience and observation. Not upon a few isolated facts and remarkable instances which may or may not be exceptions to the general rule, but upon classes of facts so numerous and extensive and so well known that they have but to be named to be recognized. The inferences drawn from them will then possess the highest probability. We have no need, in such an inquiry, of either hypothesis or theory.

It is obvious that there would have been no such thing as medicine if the necessities of man did not demand it. If, for instance, the same kinds of food or the same kind of regimen were as useful in dis-

* See Appendix, Note D.

ease as in health; but this the whole experience of mankind shows not to be so. Indeed, the whole system of diet in health must have grown out of the necessity of selecting certain articles of food which experience had shown to be most conducive to the comfort and efficiency of the strong, and the preservation and improvement of those who were less favored by nature. By the process of cooking, articles of food would be improved in flavor or utility, and, by rendering substances digestible, which before were not so, the sources of nutrition would be increased. If, however, we refuse to admit the diet of the healthy as a part of medicine, and consider that only as really medicine which was invented for the sake of the sick, which has a name and practitioners, we may say again that no one would have invented or investigated the art if the same course of life were equally advantageous in health and disease. It is probable at first that the wishes of the patient would be the only guide as to diet; or, perceiving himself weak and faint, he would attempt to use that which had strengthened him in health, even if not desired. The more intelligent and observing, finding that this failed, would restrict the quantity, and this to most persons would be a decided gain. Others would be unable to take even the smallest quantity of ordinary food; for these, soups and gruels would be invented. But soups and gruels do not agree with all, in all diseases; on the contrary, they sometimes exacerbate both fever and pain, and thus prove food and increase to the disease, but a wasting and weakness to the body. Now if we, to avoid

this error, could adopt as an axiom, that such things as are strong and nourishing are injurious, and those that are weak and diluting are beneficial, it would be an easy matter; for then, the safest rule would be to circumscribe the diet to the lowest point. But here we are liable to fall into the opposite error of prescribing a deficient diet, or one composed of weaker things than are proper. Abstemiousness may enervate, weaken and kill; consequently the practice must be varied. We must aim at attaining a certain measure, and yet this measure does not admit of weight or calculation by which it can be accurately determined. It is a matter of judgment, often requiring an amount of careful observation and skill, hardly less than that required for prescribing powerful medicines. That these matters belong to the healing art is unquestionable; of their utility to those passing through the successive stages of disease, no one can doubt; they are facts with which all are familiar, and need only to be stated to be admitted. And all will agree that a physician deserves great praise who makes small mistakes in the quality, quantity and times of administering food during disease and convalescence. Here, then, is unquestionable evidence of the reality of Medicine.*

The influence of medicine upon the cure is much more obvious in some cases than others. Some diseases cease under the influence of nature alone; others require the assistance of art; while a third class is equally beyond the powers of nature or art.

---

* Hippocrates, Ancient Medicine. Sydenham Society's Edition, vol. i., p. 164.

That many diseases are cured by nature alone, that is, by such changes only in the condition and regimen of the individual, as are prompted by his own sense of what is proper, and without the use of active disturbing agents, is abundantly proved. First, there are many affections which are trivial in their effects and ordinary duration, trivial apparently not from any difference in their nature from other more severe forms, but from the extent of surface affected, and which seldom receive aid from friends or physicians. Secondly, cases more severe occur, which from necessity, neglect, or a belief in an inert system, are, except so far as the mind is concerned, left to themselves. And again, in "some persons celebrated in the arts or the sciences, who wish in their diseases to distinguish themselves from the vulgar, and of two opposite things which they regard as equally obscure or problematical, the use or the non use of certain medicines, prefer the last, to give an additional proof of an elevated mind and a total freedom from popular prejudices, a simple glass of sugar and water, presented according to the received forms of pharmacy, becomes for their alarmed imaginations an object of repugnance they cannot overcome."* In these cases even the mind has no effect upon the cure, so far at least as the excitement of hope is concerned. These may all recover without the use of active disturbing agents. That many diseases are cured by nature alone, is proved by the observations of the most accurate of observers more than two thousand years ago. Further proof was

* Pinel. Dictionnaire des Sciences Médicales, vol. xiv., p. 250.

accumulated by Stahl, when, declaring that the reasoning soul was the great cause of the prevention and removal of all diseases, he treated many by absolute expectation. It was again proved by the observations of Pinel, continued for nearly twenty years in the hospital of La Salpétrière.*

Many have had an excessive faith in the curative power of nature. That it is equal to the cure of a large number of diseases, all admit, except Hahnemann and his followers, who declare that "nature alone cures no disease" — a doctrine at variance with common sense and the opinion of every well-informed physician from the days of Hippocrates to the present time, and which we are quite willing to accept as the distinctive mark of the system.†

In claiming so much for the healing power of nature, it must not be concluded, and will not be by any reflecting persons, that medicine is therefore useless. To draw such an inference would require— first, that nature should be equal to the cure of all diseases; and secondly, that she should cure them as rapidly and with as little suffering without aid as with. This no one can show. Besides, the hope with which the sick man turns towards those conversant with disease, is a part of his very nature, and cannot be destroyed even with the destruction of the medical art. Of necessity he calls upon others for that aid he cannot himself render. He must be directed in his needs; in the feebleness of mind and

* See Appendix, Note E.
† See Appendix, Note F.

body he must lean upon some one; and even if our art were powerless to aid nature directly, which we by no means admit, it would vindicate its claim upon the gratitude of the community, if it only prevented the interference of that which is positively injurious. We know the credulity of patients; we know also that the well-meant but often most dangerous advice of friends has rendered fatal, diseases which under rest and careful diet would speedily have reached a favorable termination. We cannot expect a sound judgment in a sick body, or a mind always strong enough to resist the influence of highly wrought descriptions of wonderful cures. Disease of moderate severity not unfrequently renders a man quite incapable of reasoning; his friends are anxious, indiscriminate remedies are multiplied, and everything is confusion and uncertainty. To bring order out of confusion, to prevent everybody from doing everything, to inaugurate a well-considered course of treatment, to inspire confidence, is the office of the physician.

Medicine is not only useful in its active coöperation by means of remedies, but also by its judicious reserve. If the disease proceeds regularly and safely, the duty of the physician is to hold his hand, be cautious and watchful, see that all dangerous complications are avoided, pains relieved, comforts increased, the strength husbanded, and the disease brought to a happy termination. His great aim should be "to help nature when she flags, and curb her when she is outrageous." We should rather liken nature to a leading wind, the direction of which

we must in the main follow, but of which the physician, as a good navigator, takes advantage; and, knowing well the currents, the coast, the dangers and the place of safety, will succeed in accomplishing a voyage in which another less skilful and vigilant would have been lost.

Those who are disposed to deny the utility of medicine should consider well what they will substitute. If they will not have one who has devoted his time and his talents to a laborious preparation for the duties of his calling; who is imbued with a sense of its dignity and of his own responsibility; who knows when to refuse remedies that are useless or dangerous; and the ways by which nature brings health from disease, and who, by weight of character, imparts confidence and commands respect; it may be that they will find his place supplied by the ignorant charlatan, equally dangerous in his officiousness and his neglect, deaf to the cries of humanity, and alive only to the insatiable greed of gain.

Time is an important element in all the processes of health or disease. This is true whether we have to do with the natural growth or the repair of injury, either in an animal, a plant or a crystal. But it would be a grave error to suppose that diseases cannot be abridged or mitigated by art, seeing that there are hardly any which cannot be prolonged or increased by imprudence.

Those diseases sometimes denominated "self-limited" (as to their number and the extent to which they are self-limited, physicians are by no

means agreed), which have a more obvious succession of processes than some others, can, there is good reason to believe, be lessened in severity and duration by appropriate treatment, because they can, unquestionably, be increased by that which is inappropriate. Besides, it will be observed that disease, by which I mean that state which intervenes between the loss of health and its restoration, is not a unit, but is made up of stages, of increase, of decline, of convalescence, requiring different management in these different stages. No one, for instance, would give cordials at the commencement of a typhoid fever, and antimonial emetics at its close, although he might be perfectly convinced of the value of each at its appropriate time. Convalescence, which not unfrequently occupies more time and attention than the preceding processes, is a state of recovery from the effects of disease, and may be much the same for several diseases, whether their course be more or less determinate, as the recovery from a fracture may be nearly the same, whatever may be its cause. That this stage may be prolonged or even life sacrificed by abuse of regimen, no one will deny. Then, again, there are sequelæ which may or may not follow the chief disease, and this also in many, if not in most cases, turns upon whether the treatment, especially as regards regimen, has been well or ill managed.

Smallpox, the external processes of which are well marked and open to inspection, and which is cited as an example of self-limited disease, may (as is abundantly shown by the great English physi-

cian in his essays on this subject) be modified by treatment, in its severity, duration, in the time of the appearance of its pustules, in their number, and consequently in the danger of its subsequent stages.

Dysentery, in which the mucous membrane of the large intestine is denuded of its epithelium, has its analogue — as regards anatomical changes, not as regards causes — in those changes taking place in the skin denuded of its cuticle by a blister, and the one may well be illustrated by the other. A blistered surface would, I suppose, be considered a self-limited disease. The amount of constitutional disturbance, other things being equal, will be nearly in proportion to the extent of surface blistered; the time required for healing will be nearly independent of such extent. The manner of healing will depend in a great measure upon treatment; if protected, it heals by the simple formation of cuticle; if irritated by friction or otherwise, it may secrete pus and heal slowly, or it may be made to slough and terminate in cicatrization after a long period. In dysentery it is not unlikely that similar relations exist between extent of surface and constitutional irritation, as well as a certain degree of similarity in the successive changes of structure — the epithelium merely is removed from the mucous membrane in some cases, accompanied by a copious serous evacuation, or covered by an exudation; or, again, the successive layers of tissues are destroyed, even to the peritoneal coat, each stage having its appropriate effects upon the system. In this disease we know that, by appropriate treatment, pain, gripings, tenes-

mus, may be controlled; movements over the inflamed surface may be prevented or restricted to long intervals, and the disease terminate in health with greater certainty and in a shorter time than when left to nature alone.

Another field, and a rare one for the exercise of medical skill, is in the influence a wise physician has over the mind of the sick, for man is an emotional and intellectual being, by which he brings hope to the despairing, certainty to the doubting, calm to the alarmed, and by that mysterious power of mind over matter makes certain a result which was before trembling in the balance. Any one who will read those remarkable letters of Sir James Mackintosh, himself educated as a physician, to the Rev. Robert Hall, during his recovery from "that calamity incident to tender sensibility, to great enthusiasm, to sublime genius, and to intense exertion of intellect," must feel that they "do good like a medicine," and that it is possible to rob even aberration of intellect of its horrors, by establishing in the mind of the patient a feeling of the superiority of a moral nature over intellect itself.*

Although the diseases which of themselves tend strongly, and generally successfully, to health are numerous, and the healing powers of nature as great as they are past finding out, there is another class in which nature fails to accomplish her work, or does it so incompletely that art becomes desirable if not actually necessary. Solutions of continuity on

* Life of the Hon. Sir James Mackintosh, vol. i., pages 251, 368.

the surface of the body, if slight, heal readily; if large, require aid. If fractures heal, it is almost always with imperfections of direction or length, or both. In dislocations, the bones obeying the muscular contractions are drawn further and further from their articular cavities. If hemorrhages from small vessels cease spontaneously, those from larger trunks or from aneurisms are inevitably fatal. Cataracts tend constantly to increase, and to destroy vision; and in iritis all the efforts of nature to exclude light only favor that condition which leads to an immovably contracted pupil. The healing of varicose ulcers requires support and position, and is very much aided by change of figure.* In strangulated hernia, the patient is snatched from the jaws of death by one of the most beautiful operations in the whole round of external medicine; while the various forms of internal strangulation, the seat of which is concealed, not unfrequently yield as signal triumphs to internal medicine, under the Fabian policy which dictates a judicious use of opium, producing quiet and gaining time for the subsidence of inflammation and the consequent relief of tension. In a pleurisy, the effusion of serum, so long as it is moderate in quantity, may be considered a blessing, inasmuch as it separates two inflamed and exquisitely sensitive surfaces, and prevents at once the rubbing and painful stitch. It should not be interfered with. Nature acts kindly; and only when inflammation has ceased, or lymph

* See Appendix, Note G.

protects the surfaces, is the serum absorbed. But when the quantity is excessive, one lung completely compressed, the other encroached upon, and the heart displaced, when nature may be unequal to the task of absorption, art withdraws the fluid, and the prospect of recovery is materially improved.

In apoplexy, where the victim is stricken down as by a thunder-bolt, the effusion of blood slowly disappears, with but little aid from art; but if the physician neglects those means which secure the nutrition of the paralyzed muscles and their nervous connections, his patient may be life-long indebted to him for a useless member, which might easily have been otherwise.

Intermittent fevers in the days of Sydenham, who says they were justly called the *opprobria medicorum*, and "were seldom or never cured by any remedy," were considered self-limited, and requiring, in ordinary cases, three hundred and thirty-six hours to complete the necessary "depuration," and sometimes six months, when their regular course had been interfered with. Under the use of quinine they are readily cured; and not only intermittents, but other malarious diseases are effectually prevented by its continued employment as a prophylactic; to such an extent, indeed, that the mean strength of our army and navy in malarious districts has been materially increased thereby.* In the Pernicious Fever, or "Congestive Chill," without treatment, three quarters of the patients die; with the efficient use of quinine,

* Sanitary Commission, No. 31. Report of Committee on Quinine as a prophylactic against malarious diseases.

one in eight dies. "This is the remedy for the disease, and only this."*

Periodical neuralgia may also be arrested by quinine. The violent spasms of colic may be quelled, the pains of acute rheumatism prevented, diarrhœa checked and sleep procured by opiates. The pains of gout yield to colchicum, and irritative coughs to various narcotics. It would be easy for any physician to swell the list, but enough, with other and perhaps more striking instances, have been cited to establish the reality of our art, and this is the only point at present.

No distinction is here made between Medicine and Surgery; both are branches of the healing art. The latter deals with subjects for the proper investigation of which more than one of the senses come in play. The relation of these subjects can be readily determined, and their character established; the operations required upon them consist principally in the mechanical arrangements for restoring displaced parts, or the ablation of those diseased. In the knowledge and treatment of physical lesions, surgery exhibits its peculiar certainty and usefulness; when it passes from these to the care of constitutional affections, like cancer and scrofula, the degree of certainty diminishes. The detection and removal of a foreign body, local in its effects, is vastly more simple than detecting and removing a hidden disease which has a sympathetic relation with the whole body. Finally, a selection of subjects is permitted for the exercise of surgery, while it is denied to the sister art, and

* Wood's Practice of Medicine, vol. i., p. 302.

this has not a little to do with the certainty of the results.

Let us now consider those conditions which are incompatible with health, and those diseases which from their very nature are incurable. Some enter the world with so little power of resistance to the influence of surrounding physical agents, that life is a struggle to which they are entirely unequal, and they rapidly succumb. Others, with more strength, may, with constant care, preserve for a while a precarious existence. The latter are among the first to seek aid from our art, and unreasonably hope for longevity, a blessing that can no more be conferred upon them than a vessel of bad materials and faulty construction, with feeble machinery, fitted only for the calmest waters, can be made to brave the storms that are weathered only by the staunch and powerful sea-going steamer. And yet the failure to accomplish this is reckoned among the reproaches of Medicine. But Medicine is not without utility here; it cannot reorganize the body, but it may show how the powers already possessed may be husbanded, to what they are equal, and what must be avoided. The records of hygiene show how delicate health can be improved, life prolonged to an unexpected extent, and a feeble body sufficiently strengthened to become the vehicle of an intellect which has enlightened the world.

Many incurable diseases are long, lasting for months or years, affording a most important field for the resources of the art, and one which must occupy much of the time and attention of its practitioners.

When it is not possible to restore to health, the medical art is often able to relieve pains more dreaded than death itself, and in most cases to render life more supportable. Medicine does not forget the triple nature of man, but while ministering to his physical wants and lessening his sufferings, extends those moral remedies which may render more gentle the descent which is inevitable. And lastly, the discoveries of recent times have placed in our hands means by which can be secured that physical Euthanasia so ardently longed for through so many generations.

We have now proved the reality of medicine by an array of facts drawn from fields of observation known to all; also from classes of facts too extensive to allow of the supposition that they may be exceptional cases. It has also been shown that medicine is in accordance with and acts in aid of one of the most important forces, that of the preservation of the individual; and finally, that it is in harmony with the powers of man over organic and inorganic nature.

This being so, we will proceed to consider the certainty of Medicine. And this is the more important, as it is the point in which it is most frequently attacked. Many minds are so constituted, that they of necessity run to extremes; if, for instance, it is shown that there is an element of uncertainty, they straightway conclude that all is chance. They do not perceive that there is a world-wide difference between knowing all of a thing and knowing nothing of a thing. Some one declared that after thirty

years of practice he was tired of guessing at the truth, and was answered that it was our business not to be tired. The tired man remains in doubt; the unwearied man arrives at certainty. And again, the very expression shows that there is truth at the bottom, to be guessed at and sought for.*

Admit that Medicine is an art, a body of precepts only, and not of principles and deductions, it by no means follows that it is all chance. Agriculture is an art having certain processes, which being duly accomplished, still leave the future crops at the mercy of the storms and devouring animals. Before these the farmer bows, as the physician bows before organic disease and "the pestilence that walketh in darkness and the destruction that wasteth at noonday."

First, what is the meaning of the word certainty? Medicine is founded on observation and experience, and as such is classed among the physical sciences; consequently its certainty must be of the same nature as that of these sciences. Certainty in physical science is the conviction of the invariable relationships of phenomena. It requires exactness in the history of the phenomena of disease and the relationships of these phenomena; it also requires that the relationship that exists between morbid processes and their modifiers should be known, and that the

* Feuchtersleben's Aerzte und Publicum.

"Yes, gentlemen, even in games of chance, intelligence goes for something, you may well believe; perhaps you have reason to know it. There are two classes of people who always win: the *Greeks*, I shall say nothing of these; and the good players. A good player always wins in the end; a good player, if he has no trumps in his hand, has them in his head."

Trousseau sur L'Empirisme.

modifier should be equal to the modification claimed. All this is derived from experience only.* But there are various kinds and degrees of certainty, and the sciences may be arranged in the order of their certainty, which also corresponds with the simplicity of their laws.

Mathematics, the most ancient and most perfect of all the sciences, has to do with numbers and figures — Arithmetic with the first, and Geometry with the second. They refer only to notions of time and notions of space, to which the existence or non-existence of matter is indifferent. "If matter had no existence, nay, if space and time existed only in our minds, mathematics would still be true."† Those who complain that our science has no mathematical certainty — and it has not — should remember that nothing but formal mathematics has this certainty; and should also remember that mathematics can furnish us with no knowledge of objective realities.

Rational mechanics, again, which supposes matter inert, obtains from observation the laws of motion and the law of virtual velocities; and except in these instances, is independent of all else — the whole science being a matter of mathematical reasoning—and consequently has its degree of certainty; but it also gives us almost as little knowledge of objects. When it is applied and has to do with physical bodies, we find abundant sources of uncertainty in friction, rigidity of cordage, weight and flexion of levers, and various other instances.

---

* Bartlett's Philosophy of Medical Science, p. 103.
† Sir William Hamilton's Lectures on Logic, p. 380.

Astronomy deals with the heavenly bodies, and knows but one law. Its facts are derived from observation, furnished by one sense only; but through the human intellect it has been placed at the head of the natural sciences. Its certainty is greater than that of any of those sciences, and this certainty we may use for the determination of time and place, and the prediction of astronomical events, and thus contribute to our most ordinary wants. But its law is one, and no power of ours can modify any of its phenomena.

Physics, which contemplates the laws which regulate the general properties of bodies in the mass, is more complex, and, in accordance with the law of compensation, we can employ instead of one sense, as in astronomy, the whole five. Observation and experiment become sources of knowledge, and as there are hardly any bounds to our power of modifying the relations of bodies, experiment becomes supreme. With this science, man begins to exhibit his power of modifying phenomena, and he becomes more powerful in this respect as the sciences with which he has to do descend in the scale of certainty. He is thus compensated, in a measure, for the loss of that certainty which gives him the power of prediction in astronomy.

Chemistry studies the changes of composition of bodies in virtue of their internal reactions. The phenomena are the most intimate and complex of any in inorganic philosophy; bodies are changed, and no longer recognized. Here, again, complexity is accompanied by an extension of the means of in-

quiry. All the senses are more freely used, and experiment and observation find full employment. The powers of observation are wonderfully improved; but we can predict nothing; instead, however, we have the power of modifying phenomena through the variety of resources afforded by complexity, which is so great that the larger part of chemical phenomena are due to human intervention.

We come now to Physiology, the science most intimately connected with Medicine, which owes its existence to Medicine, for it was the practical needs of Medicine, and a conviction of the light that physiology sheds on the vital phenomena, that first suggested and kept alive its investigations. Its phenomena are extremely complex, and cannot attain the certainty of the more simple parts of natural philosophy. It has all the complexity of the preceding physical sciences, and those due to life in addition. Here, again, is an increase of the means of investigation. Observation is more valuable, the medical education of the senses is studied; they are armed with instruments. The microscope, the stethoscope, the ophthalmoscope, the laryngoscope, and such other contrivances as will aid the inspection of cavities of the body, are brought in play. Experiment is still used and comparison introduced, which owes its great value to the variety and complexity of living beings, and challenges "our admiration for the eminent art by which the human mind has been aided to convert into a potent means what appeared at first to be a formidable difficulty."* Notwithstand-

* Comte. Positive Philosophy, vol. i., p. 373.

ing all these resources, they do not compensate for the great difficulties, and Physiology must take its stand next below Chemistry in certainty. And with Physiology stands Medicine, for the state of disease does not differ radically from the state of health, but is rather a great and long continued variation of the phenomena of health without producing any entirely new phenomenon. These variations in man have limits without which all would be confusion, and within which the action of remedies is included.

Below Physiology in point of certainty are the sciences of Ethics, Political Economy, Finance, Commerce, Government, Politics, Doctrinal Theology. Great difference of opinion exists as to the proper application of the principles of each of these sciences. Notwithstanding the study devoted to plans for the improvement of States, they not unfrequently fail, and individuals and communities are brought to ruin. Fortunes are lost by the most careful of men, by changes in public policy, or in other reactions or events, which could not be foreseen. And so of the other sciences. Cases are constantly occurring in which, although the greatest human care and prudence were exercised, hopes and confident expectations were not destined to be realized. And yet, notwithstanding their imperfection, all these different callings, founded upon the wants of the community, are filled with aspirants. Those who reject Medicine on the ground of uncertainty, should remember that, for a still greater reason, to be consistent, all the arts and sciences just mentioned should also be rejected.

This, then, is the position of Medicine with regard to certainty; it is of the nature of physical certainty, which is of various degrees, as it has relations to organized or unorganized bodies, to plants or animals; and Medicine having relation to man, the most complex of all beings, its certainty is, although inferior to that of several physical sciences, superior to the moral certainty on which rest the greatest interests of society.

The certainty of diagnosis and prognosis in disease rests upon the fact that disease is not a confused and disorderly effort of nature, but a variation of the laws of health, and always within certain limits producing a related succession of processes sufficiently constant to be subjects of investigation. They are studied, as subjects of natural history are studied, their proper phenomena carefully considered, and all accidental complications as carefully rejected, until an accurate portrait is obtained. But as these processes are successive, they require time. That time is required should not be set down to the discredit of the certainty of Medicine. It is required in all arts; and those diseases which from their rapidity preclude the investigation requisite for their recognition, are beyond the limits of our art. No man claims certainty for any art in matters beyond its limits.

As a botanist cannot determine the name of every plant from an inspection of its seed-leaves and plumule alone, neither can a physician determine each disease by its first symptoms; but as the plant and the disease develop, they become more and more

distinct, and in many diseases the certainty of the physician is but little, if any, short of that of the botanist.

This certainty is unquestionably different for different diseases, for external diseases, and for those that are internal. It is in the diagnosis of these latter, that the powers of our art and the degree of excellence to which it has arrived are most clearly displayed. Symptoms may be observed by any one having the proper condition of the senses. Whether these symptoms shall become to the observer signs, depends upon something else; it depends upon intellect, upon reasoning, and a knowledge of the relationship of facts and processes. "That which escapes the eye of the body is seized by the eye of the mind."* What would avail this power which it has been proved we have over disease, if we could not recognize disease? This faculty, therefore, is acknowledged to be one of the most distinguishing marks of the good physician. He who understands most profoundly the workings of nature in disease, must of necessity be best able to calculate the dangers, foresee the terminations, and be most likely to bring it to a favorable issue.

It would not be possible to go into a discussion of the probability of success in the various diseases we are called upon to treat. But a mere glance at the subject, even in diseases the cure of which may reasonably be aimed at, will show what great differences must exist with reference to the nature of the

* See Appendix, Note H.

disease, whether acute or chronic, the original constitution of the individual, his usual vigor, age, temperament, his mental condition, the time at which treatment is commenced, and many other circumstances, all of which must render the limits of the probability of success very broad, and between these limits we find favorable certainty, doubt, and unfavorable certainty.

The different estimate of the value of remedial treatment by different practitioners, is brought forward as an objection to Medicine. There are extremists in all professions; Medicine is no exception. Although it generally materially improves the mental condition of its followers, it cannot transform them; they are extremists still. There are those with their unbounded faith in imaginary remedies, on the one hand; and those who declare that their opinion is made up that the amount of death and disaster in the world would be less if all disease were left to itself, than it now is, under the existing condition of things — *Nihilism*, on the other.* At a distance from these two extremes, which, like most extremes, nearly meet, stands the Rational Physician. Removed from the credulity of the first and the scepticism of the second, he feels that his profession is a noble and a glorious one; and inspired with a just confidence, he looks forward to the time when some of its high aims and aspirations shall have been accomplished. He sees in remedial treatment a blessing vouchsafed to the human race.

* See Appendix, Note I.

Whether this blessing shall reach those who commit themselves to his care, he believes depends in a good measure upon the ability with which he has searched out the secrets of nature, and the faithfulness with which he learns her powers, both those within the body and those which have been elaborated and stored up in the various remedial substances* against her hour of need. With the Hippocratic Oath he declares, "With purity and with holiness I will pass my life and practise my Art. I will follow that course of treatment which according to my ability and judgment I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous." Cheered by such hopes and sustained by such faith, he seriously and thoughtfully girds up his loins for his work. He meets firmly and uncomplainingly the labors, privations and dangers inseparable from his calling, feeling in his inmost soul that no life can be better spent than that devoted to the relief of his suffering fellow-beings.

In discussing the value of remedies, it is often assumed that all medicines are hurtful. But hurtful to whom? — to the well? Under most circumstances they unquestionably are; and this is why they are not used by sensible persons in health. Hurtful to the sick? Their extensive use in disease, and the apparent relief following their use in many cases, is presumptive evidence against this assertion. To deduce the pathology of an organ from its phy-

* Medicines, by the older physicians, were called the *Hands of God.*

siology is well nigh impossible; to deduce the proper therapeutical course from the pathology, with certain rare exceptions, is also impossible. To deduce the therapeutical value of a medicine from its physiological effect, is a matter of very great difficulty.* The physiological effect of a medicine is one thing, its therapeutical effect another and often a very different thing. The assertion that a medicine which hurts a well man will hurt a sick one to the same extent, it would be hard to make good. A dose of opium large enough to kill a well man often does no apparent harm, nay, does a great deal of good to a man suffering from one of many diseases that could be named. "There is a great deal that is mysterious in what is practical." The Homœopathists reason from the effects of medicine in health to their effects in disease; but to my mind their deductions in this respect are as valueless as their therapeutics.

Another objection brought against Medicine is the number, variety, and often contradictory nature of the systems which have in succession been put forth and have disappeared. Here, it seems to me, the objection lies rather against the builders of the systems and their theories than against the art itself. To my mind, there is no such thing as a system in Medicine, any more than there is a system in Mathematics or in Agriculture. The mathematician works out each problem by itself, and he is the ablest mathematician who has the greatest variety of methods

* Bartlett's Philosophy of Medical Science, p. 118.

from which he can select that best suited to the solution of the question proposed.* So in Agriculture, each plant must have its proper exposure, soil, degree of moisture, fertilizing compounds, and their adaptation to the year and season; all this can be accomplished by no one system. It is the knowledge of the habits of plants, and the proper selection from among the various powers he has at his command, which makes the difference between a good farmer and a poor one. In disease, nature does not follow one course. Diseases are not only not all cured in the same way, but the same disease apparently is not always cured in the same way. A cut, for instance, may be healed by immediate union or by one of several other ways. The exudation of pneumonia may be removed by expectoration, or by absorption, or by both. It is of these system-makers and adopters of systems, that Sydenham complains as thwarting him in his endeavors to improve the method of treatment in smallpox, measles and scarlet fever.

There is no probability, then, that a successful system applicable to all diseases will ever be invented. We may have artificial classifications of diseases according to any principle we may select, as aids to memory, or for convenience. That there are certain principles from which we should start, and certain methods which may be followed, no one will deny.

There is an enumeration of questions to be satis-

* For this statement I have the authority of Prof. Peirce.

fied with regard to disease, which may greatly aid us. My medical instructor,* to whom I desire to express the grateful acknowledgments due to a master from his pupil, gave me, during my pupilage, four such rules of inquiry, the value of which to my mind can hardly be overrated.

First. Is the malady understood?

Secondly. Is it susceptible of cure or of material relief?

Thirdly. Are the proposed medicines well adapted to bring about the cure or relief?

Fourthly. Are they likely to leave any deleterious influence in the system?

It is no objection to Medicine, and no subject of humiliation, that it cannot explain disease. We cannot explain a common furuncle or boil, any more than we can explain weight, and this no intelligent student of natural philosophy for more than a century has attempted to explain. "By seriously inclining our minds, we may discover what Nature does, and by what organs she does it; the way in which she does it will always be unknown to man." We do not know why the tongue puts on such and such appearances in such and such diseases. Its value as a sign does not depend upon our knowing why. Men who have the leisure and inclination for such

* William Johnson Walker, M.D., of Newport, R. I., whose munificent and repeated donations to institutions of learning are but a slight recompense for the loss sustained by his withdrawal from our profession in the height of his usefulness. See his Report to the Governor and Council of Massachusetts, for a concise statement of the results of his Experimental Inquiry as to the proper conditions for giving drugs. State Prison Reports, 1843.

speculations may show anatomical or other reasons for or against any theory they may choose to adopt. The true physician will say with Sydenham: "I have ever held that any accession whatever to the art of healing, even if it went no further than the cutting of corns or the curing of toothaches, was of far higher value than all knowledge of fine points and all the pomp of subtle speculations — matters which are as useful to physicians in driving away diseases as music is to masons in laying bricks."

But whatever be the shortcomings of Medicine, the physician is not left guideless. The Supreme Being has a work for man to perform on this earth, and he has given him a power which is always active in its efforts to preserve and restore him. With this guide, physicians must not always expect success; for what art or calling is invariably successful? and in this art it is impossible, seeing that "death happeneth to all alike;" but they may expect that measure of success granted to honest and intelligent human effort. "They ought not to be satisfied with simply giving health to the sick, but they should strive to add greater certainty to the art that they administer; and they should so direct their experiments, that the Science of Medicine may grow day by day more clear and more efficient. In this way the human race may reap the advantages thereof generally, and with safety, even after they themselves have been laid in their graves."

APPENDIX.

Note A.

The question involved in the Hedgecock Quadrant is simply whether the laws of reflection and refraction of light are constant for all latitudes and longitudes. The believers in the quadrant, in opposition to all other observers, are of the opinion that they are not constant; and, further, they declare that they vary so exactly with the change of latitude and longitude, that the place can be determined thereby.

Note B.

In the Hippocratic Collection is an Essay on "The Art." It alludes to those persons who make an art of decrying all art, for the sake of displaying their own knowledge. "In my opinion," says the author, "to discover that which was before unknown, and to know which avails more than to be ignorant, or to finish that which was before unfinished, is the end and object of intelligence; on the contrary, to endeavor, by an artifice of language by no means honorable, to vilify the inventions of another without doing anything, or decrying the labors of the skilful before the unskilful, is neither the end nor the object of intelligence, but is rather the evidence of natural depravity or unskilfulness; for to unskilfulness belongs the desire without the power to gratify a malevolence which loves, in the works of a neighbor, to calumniate the good, and jeer at the bad." The defence of each art is left to the practitioners of that art, but the defence of Medicine is taken up. The art of Medicine is defined, its objects enumerated, and its limits pointed out. "I say its object is, in general, to remove the sufferings of the sick and diminish the violence of disease." The assertion that the recovery from disease is the result of chance, and not of art, is discussed, and the conclusion arrived at is that "diseases treated badly are more frequently followed by a bad result, and those treated well by a good result." The difficulties of Medicine are set forth and considered with reference to internal and

external diseases. Several objections to it are answered, and its reality proved. In the treatment of disease, there are three elements: the disease, the patient, and the physician. To those unfortunate persons who see in fatal results the effects of drugs only, the author addresses a few considerations, pointing out the true relation between physician and patient. The essay concludes, "That, therefore, Medicine has within itself ample means for the succor of the afflicted, and that it would rightly refrain from attempting to cure incurable diseases, or if it did attempt it, would not commit an error, has been shown by what has already been stated, and also by the practice of good physicians who prove these positions by their works rather than by their words, being persuaded that the common people place more confidence in what they see than in what they hear."—*Prof. Sophocles; Mss. Translation.*

This tract appears to have been written to meet the popular scepticism of the times with regard to Medicine. Some of the views developed in this Address may be found in the "Art"; how many, may be easily ascertained by any one who will take the trouble.

NOTE C.

The gardener can, by starving down his plants, reduce them to a condition in which they will mature but a single perfect flower; or, on the contrary, by generous nourishment, can increase both the number and size of the flowers.

Changes of some of the colors of flowers can readily be produced; Prof. Gray informs me that the Escholtzia, naturally yellow, the most difficult of all the colors to modify, has been made to assume a considerable variety under the influence of differences in soil, exposure and treatment.

NOTE D.

The earliest instance of sanitary measures is said to be that connected with military operations, and described in the first Book of the Iliad. A nine days' epidemic, attacking men and animals, raged in the camp. Apollo, the god of acute diseases, had been insulted; he was appeased by proper offerings; at the same time Agamemnon issued orders for a general police of soldiers and camp, directing that all filth should be effectually disposed of, by throwing it into the sea.—*Malgaigne. Etudes sur l'Anatomie et la Physiologie d'Homere.*

One of the most successful instances of the prevention of disease by judicious and energetic hygienic measures, occurred at New Orleans during

the Rebellion, upon the occupation of that city by the government forces under Major General B. F. Butler. New Orleans is situated in the midst of immense swamps, with the Mississippi on one side, and Lake Ponchartrain at the distance of five or six miles on the other. The land near the river from which it was originally deposited, is higher than that near the lake towards which all the drainage tends. The swamps lie in the rear of the city, at a distance varying from half a mile to a mile or more from the river, and are covered by a dense growth of cypress trees and underbrush. Two navigable canals extend from the lake into the heart of the city, each terminating in a basin for the accommodation of small vessels. The drainage is effected by means of gutters on the sides of the streets, emptying either directly into the canals, or through others leading into them, and so into Lake Ponchartrain, and then by way of the Rigolets into the gulf. The general surface of the earth is so soft and marshy that it is necessary to bury the dead above ground, in tombs of masonry, or in raised graves.

The action of the Forts took place April 24th, and on the first of May Maj. Gen. Butler with 2,000 troops, mostly New Englanders, entered the city. It was found in a most filthy condition; because of the troublesome times, the contractors upon all the streets and canals had utterly neglected to comply with their contracts for cleansing and purifying the streets, and the filth was indescribable. In view of this most alarming sanitary condition of the city and the approach of the epidemical season when yellow fever would be expected, after consultation with the most eminent physicians who would give advice, some refusing to give any opinion (to their shame be it said), with the apparent hope "that the pestilence would do what the rebel arms could not—drive us out," and acting with the advice of his medical staff, General Butler took the most energetic measures for purifying the city itself, and thus prevent the possibility of engendering disease. [See General Butler's Letter to Secretary Stanton, Oct. 2d, 1862—and Report on the Conduct of the War, part 2, p. 355.]

This was to be accomplished by the most scrupulous attention to cleanliness. The streets were thoroughly cleansed by a force of a thousand men, paid from a relief fund obtained from the wealthy inhabitants, especially those who had subscribed largely for the purpose of resisting the Government, and also from funds voted for this purpose by the city authorities. By these means ten or eleven miles of canals were cleaned, some of which had not been cleaned for twelve or fifteen years. Large pumps were put in motion for raising the filthy water from the canals and discharging it into the bayous, by which it escaped into the lake. Several thousand tons of coal were given to the water companies, to be expended in keeping up a constant supply of water in the street gutters to wash all impurities into the canals. No garbage of any kind was allowed to be thrown into the streets or gutters, but it was required that it should be kept in proper vessels and daily removed by the public carts without the limits of the city. A large quantity of chloride of zinc, obtained from Lowell, Mass., where it is used

in the preservation of wood, was freely distributed in all places likely to be unhealthy. In fine, every precaution was taken to make the city clean and healthy, and keep it so.

In the second place, a discriminating quarantine was established, having reference to the cargoes, the general cleanliness of the ships, and the length of time spent at an infected port. If the ships belonged to an infected port and the cargo was manufactured there, the crew acclimated and indifferent to sanitary regulations, they were kept under quarantine longer, to watch the probable development of the disease and to assist the operation of the purification, than vessels loaded at a northern port, which had merely touched at a port infected with yellow fever and held communication with the shore under the restrictions imposed by the fears of unacclimated officers and crews. It was, however, determined to err, if at all, on the safe side, holding ever of far greater importance the lives of a large city and of the army than the possible damage to any commercial adventure from detention. No vessel that had been at an infected port was allowed to come to the city under thirty days. If she had anything like a perishable cargo, it was taken out and fumigated. The quarantine was more perfect than the blockade. Five or six cases of fever occurred at Quarantine, only seventy-five miles from New Orleans, and but *a single one* at the city, and this one, in the opinion of General Butler, fully justifies and illustrates the sanitary regulations adopted.

The U. S. Steamship "Ida" having touched at Nassau only to take in coal, as the captain stated, and being there but a short time, was allowed to come up by the Health Officer after fumigation and other precautions. It turned out, however, that the captain did take passengers on board, and one of them was taken sick on shore with malignant yellow fever the day after his arrival. The square in which he was, was immediately shut up by a guard, and no one allowed to enter or leave it; the square was cleaned up, everything whitewashed and fumigated. On the sixth day he died and was buried; almost everything he had touched was destroyed, and only acclimated persons were allowed to do the last sad offices. The house in which he died was most thoroughly purified, and by the blessing of "Him who holdeth all in the hollow of his hand" the pestilence was stayed. This was the only case of yellow fever in the city, although it existed all around, at Havana, at Nassau, at Key West, at Pensacola, at Galveston, at Matanzas, at Vera Cruz and Mobile. The rebels imported it into Altakapas and Sabine Pass, in running the blockade. Up to the first of October, 1862, there had been no malignant fever or epidemic of any kind in New Orleans, and its mortality returns show it to be extremely healthy. In one Regiment, the 13th Connecticut, a thousand strong, garrisoned in the Custom House since May 15th, but one man was lost during the months of July and August. During the present year the same attention to cleanliness has been kept up or even improved upon. Notwithstanding the prediction of the certain appearance of yellow fever and its actual existence at Quarantine, no case has appeared in New Orleans.

In view of these circumstances, and of the frequent epidemics of yellow fever, some of which are painfully fresh in our minds, and also in view of the constant occurrence of sporadic cases in July and August of each year, it is with honorable pride that General Butler, in his Farewell Address to the People of New Orleans, says, "I have demonstrated that the pestilence may be kept from your borders."

These most successful sanitary arrangements, the establishment of excellent Hospitals furnished with every accommodation for the sick and wounded, his recognition in General Orders of the humane courage of his surgeons under fire in personally bearing off the wounded as they fell, vindicate the claim of General Butler to rank in humanity and philanthropy above most military commanders.

Note E.

If I were to name a disease which more than others illustrates the healing powers of Nature, it would be Pneumonia. So remarkable in its hidden causes, its great differences at different periods of life, the suddenness of its attack, the rapidity of its progress, its extreme gravity, physiologically and anatomically, and, lastly, the celerity and certainty with which the diseased products are completely removed and health re-established.

Note F.

"That state of the organism which we call disease, cannot be converted into health, but by the aid of another affection of the organism excited by means of medicines. The experiments made upon healthy individuals are the best and purest means that could be adopted to discover this virtue."—*The Homœopathic Medical Doctrine of the Healing Art; a new system of Physic, translated from the German of S. Hahnemann, by Charles H. Devrient, Esq., p.* 162.

Hahnemann declares that seven eighths of all chronic diseases originate in *psora*, or common *itch*; this is theory. Common itch is caused by an insect; this is fact. What now becomes of seven eighths of the theory? But homœopathists say, and say truly, that the theory of homœopathy (infinitesimals) is of no consequence, the only question is, "whether it be, as actually employed in the treatment of disease, a valuable acquisition to the practice of medicine." If Nature alone cures no disease, its value is great; for unquestionably many get well under its use. We have satisfactory evidence that Nature alone cures *many* diseases. Can it be shown, with equal certainty, that she does not cure all of those which cease during the use of infinitesimals?

Note G.

The longer time required to heal a round ulcer, was noticed by Ambrose Paré; one of his Canons reads as follows:

L' Vlcere rond ne reçoit cure,
S' il ne prend vne autre figure.
Malgaigne's Edition, Vol. III.

As the growth of skin is always from other skin, that ulcer will obviously heal most rapidly, other things being equal, which has the most circumference. This is the great secret of the success of Baynton's method of dressing ulcers.

Note H.

The distinction between symptoms and signs, so often confounded, is well illustrated by the following from Captain F. B. Head's Rough Notes, taken during some rapid journeys across the Pampas, p. 257.

"'The Gaucho pointed to the sky, and said, 'See! there is a lion.' I started from my reverie, and strained my eyes, but to no purpose; and he showed me at last, very high in the air, a number of large vultures, which were hovering without moving; and he told me they were there because there was a lion devouring some carcase, and that he had driven them away from it. We shortly afterwards came to a place where there was a little blood in the road, and for a moment we stopped our horses to look at it. I observed, perhaps some person had been murdered there; the Gaucho said, 'No;' and, pointing to some foot-marks which were near the blood, he told me that some man had fallen, that he had broken his bridle, and that while he was standing to mend it, the blood had evidently come from the horse's mouth. I observed, perhaps it was the *man* who was hurt; upon which the Gaucho said, 'No;' and, pointing to some marks a few yards before him on the path, he said, 'for, see, the horse set off at a gallop.'"

The Englishman might have speculated long and wisely upon the flight of vultures, upon the structure and functions of their organs, even to the minutiæ of a feather, and yet never been so far benefited by his speculations as to diagnosticate a lion. What are mere symptoms to one, become, through a knowledge of their relationships, valuable signs to another.

Note I.

George Ernest Stahl, Professer of Medicine in the University of Halle, did a great service by calling the attention of physicians to the influence of mind upon disease, and also by insisting upon what seems to us obvious, and yet was overlooked by his predecessors, that the human body is neither a machine nor a chemical laboratory, but is possessed of vitality. But he dwelt so long upon this idea that he at last came to the belief that the

Rational Soul, or Nature, did all. He had but little confidence in medicines, of any kind. He not only rejected cinchona in fever, but declared, in the credulity of his scepticism, that it produced obstinate constipation, engorgements of the abdomen, dropsy, phthisis, and many other diseases. Dropsy, he tells us, was never common in England till the introduction of Jesuit's Bark, though others remarked that its increase was also coincident with an increased use of spirituous liquors. Opium he considered a dangerous palliative, and discontinued its use. Indeed he hardly used anything of the kind except his peculiar preparation of cynoglossum, which appears to have been a feeble narcotic. His colleague, Hoffmann, did all he could to extricate him from his errors. While admitting that the Rational Soul could do much, he reminded Stahl that it had been liable to error ever since the *Original Sin*, and must not therefore be implicitly relied upon. But neither theological arguments, nor others much more applicable, had any effect; he grew more and more sceptical, and died a believer in amulets and charms. His errors apparently grew out of a too limited view of Nature; he did not observe that Nature includes far more than what is in the human body; that her powers are exhibited in all animals, plants, and crystalline forms. The *vis medicatrix* is not only in the body, but is to be found in the medicines external to the body.

OBITUARIES.

PAUL SPOONER.

Dr. Paul Spooner was born in Fairhaven, Mass., June 12th, 1786, and died in New Bedford, July 18th, 1862, after a long and useful professional career of over fifty-two years, retiring from active labors as a physician at the advanced age of seventy-four years. As a man, he was highly esteemed and beloved by all who knew him, and always observed the strictest rules of professional etiquette. His practice, especially as an obstetrician, was eminently successful, and a case-book kept by him for many years shows how numerous were the cases he attended, and how successful were his operations and treatment.

His connection with the Bristol South District Medical Society dates from its commencement in 1839, in which year he was elected Treasurer. He was President from 1841 to 1843, and was one of its most active members up to the time of his death. F. H. H.

SAMUEL FOSTER HAVEN, Jr.

Dr. Samuel Foster Haven, Jr., fell, mortally wounded, at the battle of Fredericksburg, December 13th, 1862. He was born on the 20th of May, 1831, at Dedham, Mass. An only child, early deprived by death of a mother's care, he was bound by the tenderest ties to his father, to whom he was at once son, pupil, and cherished companion. At the age of seventeen years he entered the freshman class of Harvard College, and was graduated in 1852, the last representative of a name which appears through five successive generations in the catalogue of the Alumni of the University. On leaving College he entered upon the study of medicine in Worcester, as a pupil of the late Dr. Henry Sargent, and was subsequently a member of the Tremont Street medical class in Boston. During the last year of his pupilage he held the position of house physician in the Massachusetts General Hospital, and in 1855 he was admitted to the degree of Doctor in Medicine and

became a fellow of the Massachusetts Medical Society. In the autumn of 1855 he visited Europe, and devoted nearly two years to his favorite study of Ophthalmology, in London, Paris, Vienna, and Berlin. On his return from Europe he opened an office at No. 3 Asylum Street, in Boston, and in the spring of 1858 removed to Worcester, where he devoted himself chiefly to the treatment of diseases of the eye. During his short stay in Boston he labored earnestly and efficiently among the poor of his neighborhood, and the physician who follows in his footsteps still hears his name mentioned in grateful remembrance by many who found in him a kind and sympathizing friend.

At the first outbreak of the rebellion he volunteered his services, and on the organization of the 15th Regiment Massachusetts Volunteers he joined it as Assistant Surgeon. For several months, owing to the illness of the Surgeon, the whole medical charge of the regiment devolved on him, and on the 21st of July, 1862, he was appointed to the rank of Surgeon in the same regiment. From the time he entered the army until his death on the battle-field, he had never left his post for a moment's rest or recreation. He shared with his regiment in all its dangers and fatigues, and in action was always to be found administering to the necessities of the wounded in the thickest of the fight. Brave as the bravest, he felt that his place was with his men; and when, on the fatal day at Fredericksburg, he was assigned to duty in the hospital, it was at his own urgent request that he was permitted once more to accompany the regiment. He fell at the foot of the flag; the commander of the regiment, the color sergeant, and his own orderly, being prostrated by the explosion of the shell which proved fatal to him.

Dr. Haven was a thorough student of the literature of his profession, and as a practitioner united in a high degree sound judgment with unusual mechanical skill. Modest and unassuming in the society of his equals, he displayed in the camp and on the battle-field a degree of energy and self-reliance which compelled the admiration of those of his friends who had before known only the gentler side of his nature.

J. G.

ROBERT WARE.

Dr. Robert Ware died in Washington, North Carolina, of double pneumonia, on the 10th of April, 1863, aged 29 years. He was at that time Surgeon of the 44th Massachusetts Regiment. The son of our respected Fellow, Dr. John Ware, he was born in Boston, Sept. 2d, 1833. He was graduated at Harvard College in 1852—and took his

diploma, at the Medical School of the same University, in 1856. He immediately began to practise in Boston; and in July, 1857, he was appointed District Physician of one of the largest and most laborious Districts of the Boston Dispensary. On the breaking out of the war he was one of the first to enter the service of the Sanitary Commission, in 1861. He continued in that department until the close of the Peninsular Campaign, in 1862. Very soon afterwards he accepted the position of Surgeon of the 44th Regiment, and remained with them until they were hemmed in, under General Foster, at Washington, N. C., where, worn out by over-work in his professional duties, he contracted the disease which closed his brief, but honorable career. His many noble qualities deserve something more than so short a notice at our hands.

Although a younger member, none were more promising in our profession. As modest and retiring as he was meritorious, he was, perhaps, the less known by the profession at large, because he was too busy in observing and working to write much. In the winter of 1860, he prepared a very elaborate and thorough Report upon the Smallpox, then prevailing, of which the suggestions were considered of sufficient importance to be printed, by a vote of the Legislature, and distributed throughout the State. His mind was clear, logical, and concise; his powers of observation excellent, and his industry in his professional labors untiring. So consistent, honest, and persevering a character, promised to develope in time many results worthy of preservation in medical science. To this character he added benevolence, charity, and many Christian graces. We have reason to know that he was warmly remembered in humble gratitude by his wide circle of charity patients on the Dispensary—while of his services as Inspector on the Sanitary Commission, those who may read the work of Mr. Olmstead on "Hospital Transports," will see how prominently he appears in the arduous and gigantic labors of that benevolent association; where he shines, in fact, almost as the chief, among many noble fellow workers.

Of so simple, pure, and honorable a life, which illustrates the noblest virtues of our profession, it is perhaps wrong to regret the fitting end, though it may seem untimely. Exhausted not only by the labors incident to an active campaign, but also by his freely-given care of all unfortunates who came within his ken, he laid down his life in the cause. For him there was no distinction of race or of party; wherever there were sickness and wounds, whether of friend or foe, white or black, he saw only our common humanity suffering around him; and with too arduous efforts to succor all alike, in that noblest of services, he died.

D. W. C.

ARTICLE IV.

RECENT PROGRESS IN SURGERY.

BY J. MASON WARREN, M.D.

OF BOSTON.

READ AT THE ANNUAL MEETING, MAY 25, 1864.*

GENTLEMEN,—

THE honor which you annually confer in the appointment of the orator of our yearly festival imposes no ordinary duty, in view of the eloquence and ability which have so uniformly characterized the lessons delivered from this chair.

In instituting this Annual Address, the founders of our Society seem to have intended to call in turn upon its fellows for such lessons as individual experience might suggest; and I am the more impressed with this thought, when I reflect, that, of the eminently practical and philosophical discourses which have been published under its auspices, the best and the most important have been upon subjects intimately connected with the daily studies and pursuits of their authors. In taking Surgery, therefore, as

* At an Adjourned Meeting of the Mass. Medical Society, held Oct. 3, 1860, it was

Resolved, "That the Massachusetts Medical Society hereby declares that it does not consider itself as having endorsed or censured the opinions in former published Annual Addresses, nor will it hold itself responsible for any opinions or sentiments advanced in any future similar addresses."

Resolved, "That the Committee on Publication be directed to print a statement to that effect at the commencement of each Annual Address which may hereafter be published."

my theme, I propose to review the experience of the past thirty years, embracing as it does a period which will be ever memorable for great practical inventions and splendid scientific discoveries.

At the very threshold of our subject, we encounter fundamental changes in the present manner of viewing and treating disease, as compared with the theories and practice which have prevailed within the memory of many even of our younger brethren. The important part borne by eminent members of our own body in working out and illustrating this great revolution, demands at least a passing notice of a few of its successive phases, as developed among us, and promulgated by the authority of our Society.

Twenty-nine years ago, a great truth, which had already dawned upon a few leading minds, first found distinct utterance in Dr. BIGELOW's admirable discourse upon "Self-limited Diseases;"* the leaven of which has been silently but steadily at work, until it has completely changed the whole aspect of medical practice. In this paper, the great principle is first distinctly enunciated, that many of the most common diseases have a fixed course and duration, which cannot be abridged or materially changed by the exhibition of medicines. In such cases, therefore, the duty of the physician consists chiefly in mitigating sufferings incidental to the disease, while he prevents the officious employment of violent measures, which, from the nature of the case, can only be injurious. The lesson taught is faith in the curative powers of nature.

* Self-limited Diseases. By JACOB BIGELOW, M.D. Boston: 1835.

In another address,* sparkling with the characteristic genius and brilliancy of its distinguished author, which, once heard, is never forgotten, and the like of which we scarcely expect to hear from other lips, we are presented with a vivid picture of the potency of many drugs for harm; and, in view of the awful destruction of human life by these powerful agents when unskilfully administered, the conviction is brought home to every judicious mind, that it would be a less evil even to abjure their use, than to countenance their indiscriminate employment by ignorant and unprincipled men.

Yet another paper,† addressed to us in the form of a paternal letter from our Nestor, whose presence we always welcome, and to whom we delight to point as a living ideal of the good and wise physician, shows us that the very drugs which are often perverted to the greatest harm are also among our most potent agents for good: like sharp tools, they are only dangerous in the hands of those who have not learned how to use them.

The last of these addresses‡ (in point of time) is, in some sense, a summary of the whole matter. Recognizing the fact that many self-limited diseases end in recovery, we are shown, that in other diseases, equally self-limited, the natural tendency is often to the destruction or permanent injury of the affected organs; and that, in many of these very diseases,

---

* Currents and Counter-currents in Medical Science. By Oliver Wendell Holmes, M.D. Boston: 1860.

† Jackson on the Utility of Medicine. Boston: 1861.

‡ The Reality and Certainty of Medicine. By Morrill Wyman, M.D. Boston: 1863.

the attendant phenomena may be so far modified by rational treatment as to make all the difference between life and death to the patient. Secondly, many diseases are not self-limited; that is, they do not appear to have any definite and predetermined period of incubation, progress, and decline: and it is in this class especially, as well as in the early or formative stages of many usually included in the former class, that great and beneficial changes may be wrought, or even the disease cut short altogether by the application of the established principles of the healing art. Medicine, therefore, is a real and a beneficent art, although its most useful instruments may be capable of being perverted to mischief by charlatans and pretenders. The lesson of the last year is, the reality and certainty of the healing art. It should encourage each one of us to labor to improve himself in the knowledge of the principles of that art.

The influence of modern improved theories of pathology and therapeutics, although generally associated in the mind with the practice of medicine, has been almost equally felt in nearly every department of surgery. The intimate connection between the two sister branches of the healing art, illustrated in the last generation by Abernethy, and just enforced anew from the same chair by his most distinguished successor, renders it impossible for any improvement in the one to remain long unfelt in the other. Especially are these changes seen in the present treatment of chronic surgical diseases, and in the amelioration of the severe discipline which was formerly con-

sidered essential to prepare a patient for an operation, or to protect him from its supposed consequences.

While these great improvements have been in progress in the general or constitutional management of surgical patients, it may seem to a casual observer, that, in local treatment, we in this neighborhood have possibly retrograded from the practice of our fathers. I remember the time, when, after an amputation, or the excision of a breast or a large tumor, it was the universal rule to bring the edges of the cut integuments together nicely with straps, compresses, and a bandage, with the full assurance of finding the wound nearly healed on the removal of the dressings. At the present day, however, such a result is seldom attained in city practice; union by first intention being, for the past twenty years, the rare exception. Occasionally, the margins of the skin seem at first to unite, and promise a speedy cure; but suppuration almost always ensues in the deeper parts, and it soon becomes necessary to give vent to the secretions, either by breaking up the newly-formed adhesions, or by making a new opening.

The causes of the change which has taken place here in the processes of repair are found in the impaired hygienic condition of our city, arising out of the great increase, and consequent crowding, of its population; for it is only necessary to travel a few miles into the country to find again the same favorable influences which we formerly enjoyed. This explains, also, what must have struck every one as an anomaly in Parisian surgery: I allude to the fashion, which, until within the past few years, almost exclu-

sively prevailed there, of taking effectual measures to prevent union by first intention. The obvious explanation of this practice is, that, in the hospitals of a crowded city like Paris, immediate union of the deeper tissues is of the rarest possible occurrence. The early union of the integuments, therefore, if it occur, can only aggravate the trouble by impeding the escape of the sloughs and *débris* from the granulating surfaces beneath; but it cannot be denied, on the other hand, that the means taken to prevent the confinement of the discharges often produced so much irritation as greatly to increase the extent of the destructive action.

At the period when I was prosecuting my studies in Paris, M. Roux was almost the only surgeon of note in that city to break in upon this routine of irritating dressings. He had visited England, and had there seen the good effects of the simpler treatment adopted in the London hospitals, upon which he had written a valuable treatise. But the classical doctrines of the French school were not to be subverted in a day; and it is only within the past few years that a new generation of surgeons, working in the midst of more favorable hygienic influences, have been able to raise Parisian practice, in this respect, to the English and American standard.

The possibility of obtaining union by first intention lies at the foundation of the art of plastic surgery; and it is in a great measure owing to the general introduction of modes of treatment favorable to this result that the department of operative surgery has of late made such remarkable progress.

But another even more conspicuous change presents itself when we contrast the operative surgery of to-day with that familiar to all but the very youngest among us. I refer to the present universal employment of *artificial anæsthesia ;* and it is with especial pride that we reflect that it was in our own city, and under the auspices of members of our own body, that the full value of this immortal discovery was first demonstrated and published: and it is truly remarkable, that, at the present day, artificial anæsthesia is best attained by ether, used in substantially the same manner as when it was first tried in surgical operations at the Massachusetts General Hospital. While chloroform has killed its hundreds, and while hardly a journal arrives from Europe without some notice of new cases of death from the use of this potent agent, wonderful to relate, out of the hundreds of thousands of cases of etherization, the first victim to its action is yet to be recorded. It is not pretended by this statement entirely to abjure the use of chloroform, which, in some exceptional cases, is certainly preferable to any known anæsthetic agent; being far more concentrated in form, more agreeable, and more active in administration, than any of the many substitutes which have been proposed for it. On the battle-field, especially, its greater portability is likely always to secure the preference for it over safer but more bulky anæsthetics.

The first, and perhaps the most important, application of ether is in producing unconsciousness of pain; and it is for this boon that the patient will ever be chiefly thankful. To the surgeon, also, the

non-infliction of pain is often a matter of the greatest moment; for he can now undertake at his ease a long and tedious dissection, or a delicate exploration of an acutely inflamed cavity, undisturbed by involuntary movements of his victim. The power to abolish pain has also materially enlarged the domain of operative surgery, not only by diminishing the dread of common operations, and allowing of their more frequent performance, but also by admitting into the list of justifiable operations some whose severity would otherwise, in most cases, forbid even the thought of attempting them.

The other great application of ether in surgery depends upon its power of relaxing the voluntary muscles by inducing a state of the brain analogous to coma. In the deep sleep of complete etherization, the manipulation and reduction of fractures and dislocations, the diagnosis and treatment of anchyloses, the reduction of strangulated hernia, &c., are immensely facilitated. The question of its use in certain special departments of surgery will be noticed elsewhere.

This is not the place to dwell on the very important uses of ether in midwifery, and in painful or convulsive medical diseases; but of its inestimable value in the alleviation of suffering during the last moments of life, and letting the patient gently downwards in his passage to the other world, I cannot omit this passing notice.

The duty still remains for the public to show their appreciation of the value of this grand discovery by awarding to the several gentlemen who were instru-

mental in its introduction a substantial testimonial, which shall be in some degree commensurate with the benefits which they have conferred upon society.

The *anæsthetic action of cold*, developed by a refrigerating mixture of ice and salt, as suggested by the distinguished Dr. Arnott, may be advantageously substituted for etherization in many cases of slight operations confined to the skin and subcutaneous tissues. The operation must be performed quickly, as the parts thaw with great rapidity as soon as the warm blood begins to flow from the divided vessels. For operations requiring nice dissection the method is inapplicable, owing to the rigidity of the frozen parts.

OPERATIONS FOR STONE IN THE BLADDER.

The great surgical novelty, at the time of my first visit to Europe, was the now-familiar operation of *lithotrity*. The possibility of breaking up the stone in the bladder, and extracting the fragments through the natural passages, had been shortly before demonstrated by Civiale, and rendered safe, expeditious, and practically useful, by the improved instrument of Heurteloup. It was my good fortune to become acquainted with Baron Heurteloup in London through the courtesy of Sir Astley Cooper, and to witness some of the first operations performed by the new method in that city. It will be remembered, that he seized the stone precisely as is done with the modern lithotrite; and then, fixing the instrument firmly to the table in a vice, crushed it by repeated blows of a hammer. At this time, two important defects in

the operation threatened to prevent its general adoption. These were, 1st, The great inconvenience of frequently adjusting the instrument in the vice, which was soon overcome by the substitution of a screw or rachet movement for the hammer; and, 2dly, The danger of fragments of the stone so clogging the jaws of the lithotrite as to render its withdrawal extremely difficult, and in some cases impossible except by severe laceration of the urethra. This defect, also, was soon remedied, by making an opening, or "fenestrum," in one of the jaws, through which the fragments readily escape.

The skill attained by M. Civiale in this very delicate operation was almost miraculous. The instrument was slowly introduced through an irritable urethra into an inflamed bladder,—the mind of the patient being at the same time assured by gentle management,—the stone caught and broken, then recaught and broken again, all seemingly without effort, and without evoking any sign of pain. I have attended a great number of operations by M. Civiale,—many in public, and some in private practice. He carried with him a single stone-crusher, a catheter, and a small syringe. Entering the room of the patient, he would pass the catheter, inject three or four ounces of water, introduce the lithotrite, and seize and crush the stone, all in the time ordinarily occupied by a short medical visit.

The success of lithotrity, so far as my own observation goes, depends upon the following circumstances: 1st, To use an instrument of moderate size, and so constructed as thoroughly to clear itself of

the fragments. 2dly, To inject the bladder moderately with water. 3dly, Not to move the instrument about too freely. The importance of this last precaution cannot be too strongly enforced. If the instrument is rudely scraped over the sensitive mucous membrane, already irritated by contact with the rough stone; or if the jaws are frequently opened and shut without any well-defined method; or if the stone is carelessly seized, entangling with it perhaps a part of the walls of the organ,—inflammation, or even gangrene and death, may ensue. By at once gently sinking the beak of the instrument, however, into the most dependent part of the bladder, opening and giving it a slight oscillating movement, the stone will, in almost every instance, fall readily into its grasp, and may then be raised into the middle of the cavity, and there broken. The same process may be repeated upon one or two of the larger fragments; taking care, however, not to protract the operation beyond a few minutes. A large catheter may now be introduced, and some of the finer particles allowed to escape through it. It is not, however, until after the lapse of two or three days, that the bladder recovers sufficient tone to expel the fragments spontaneously.

In old persons, in whom the prostate is more or less enlarged, the stone is often concealed in a cavity behind it, and requires that the beak of the instrument should be turned backwards, and the stone pushed out from its lodging-place before it can be properly seized.

Ether is a most valuable adjuvant in a great pro-

portion of cases of lithotrity. When I first urged its employment in this operation, in a paper published in "*The American Journal of the Medical Sciences*" in 1848, many surgeons objected (and some still object) to its use, upon the ground that the consciousness of the patient is necessary to give warning if the folds of the bladder become entangled in the jaws of the instrument. In answer to this objection, it may be stated, that the mere contact of the instrument, in an irritated state of the organ, will give rise to greater suffering than the actual engagement of the mucous membrane in other cases; and that, to a surgeon at all in the habit of performing this operation, the interposition of a fold of soft tissue is at once perceptible, although I have never known the patient to exhibit any unusual pain from this circumstance. In cases of extreme irritability of the bladder in persons in an advanced stage of the disease, where there is an entire want of power to retain the urine, the bladder embracing the stone, and the urine passing off almost as soon as secreted, I have been astonished at the vast quantity of ether which is required to effect perfect relaxation, so as to admit of the injection of the small amount of water necessary to prepare it for the subsequent manipulations.

The subject of *lithotomy* at once brings to mind the memory of Dupuytren, the great lithotomist of his time, whom I saw in the zenith of his fame, while engaged in the delivery of those remarkable courses of lectures which were soon after collected, and published under the title of "Leçons Orales de

Clinique Chirurgicale." He was by far the best lecturer of his day; delivering his ideas with wonderful clearness and always discussing questions of the greatest practical importance. In the present department of surgery, we owe to him the improved method known as the "bilateral," which, with slight modifications, is still a favorite operation with many French and American surgeons, and which I have myself performed with great satisfaction. Its chief peculiarity consists, as is well known, in the transverse incision of the skin, which is made directly in front of the anus; and, secondly, in the double division of the prostate by the "lithotome caché. The absence of important nerves and vessels in the median raphé affords a strong argument in favor of a median over the common lateral incision; and the recent revival of perineal section by Mr. Syme has demonstrated the fact, that the bladder may be safely and easily reached in this manner. Influenced by these considerations, I have several times operated by a median incision in the raphé, dividing the prostate with the double lithotome or with a bistoury. The advantage of this method over the transverse incision of Dupuytren is the greater room which it affords for the withdrawal of the stone through the external wound, while all its peculiar advantages are secured by the double incision of the prostate. It appears that a similar operation has been also performed with success by Henry Thompson, of London, who attributes its invention to M. Civiale.

Of other eminent lithotomists whom I saw, and with whom I had the honor of a personal acquaint-

ance, Mr. Key of London, and Mr. Liston of Edinburgh, were especially distinguished. The former of these gentlemen operated in a manner peculiarly his own; using an almost straight staff, and making all the incisions with a single round-pointed knife. Mr. Liston performed the ordinary lateral operation, in which his dexterity was proverbial.

Lithotomy, notwithstanding the extraordinary success said to have been attained in certain sections of our own country, is nevertheless, in town and hospital practice, an operation attended with considerable risk. It is especially indicated in young children, in whom the urethra is too narrow to admit of the safe introduction of the crushing instrument; and in the case of encysted calculus, which cannot be reached in any other way.

The operations for stone, in this neighborhood, may be said to be very rare. Dr. J. C. Warren, in a paper published in 1844, stated, that, in the course of forty years, he had been called on to perform all the operations for stone which had been done in Boston. The whole number had not exceeded twenty-five cases, and the population had increased during this time from twenty-six thousand to upwards of a hundred thousand. Of the twenty-five cases, not more than three were in persons natives of Boston or vicinity. In the last thirty years, I have myself operated on rather more than thirty cases; and the operation has also been performed by other surgeons. Most of these cases were from a distance, and but four or five of them belonged to Boston. Two-thirds of these cases were operated on by lithotrity; and,

as well as those by lithotomy, have proved successful.

FRACTURES.

The great importance of these injuries, and the absolute necessity in most cases of proper surgical treatment, have given them a most prominent place in the surgery of all ages. From the earliest times of which we have any record, down to the present day, the treatment of these injuries has been oscillating between the employment, on the one hand, of powerful engines for their reduction, and retention in place; and, on the other hand, of simple rest in an easy position. Both of these extreme modes of practice have been extensively employed within the past thirty years, and both methods have undergone many and great improvements. I have myself become more and more convinced of the propriety of doing as little as possible for the first few days; and have generally been content with making a slight extension, so as to bring the broken ends of the bone together, so far as they will come naturally, and without violence; then waiting until the irritability of the muscles has subsided before proceeding to the application of the permanent apparatus of splints and bandages. In very many fractures, where great immediate distortion is produced by muscular contraction, after a few days of rest, combined perhaps with gentle extension, the broken bones seem quietly to settle down into their proper places, and the whole treatment resolves itself into careful watching, with occasional slight manipulation, to remedy accidental

displacements and to prevent excoriation. Many years ago, in a conversation with Dr. Dugas, an eminent surgeon of Georgia, I was much struck by the answer which he made to my question, how he treated fractures of the thigh. "I tie a brick to the foot," said he, "and let it hang over the end of the bed." The weight of the brick, on the one hand, and the voluntary efforts of the patient to resist the traction which tends to drag him down, on the other, constitute a very simple and efficient means of extension. I repeated the experiment—which is, at least, as old as the time of Hildanus—upon a powerful man with a fracture of the thigh. The extension was easily and effectually maintained during the three or four weeks that the man remained under my care; and the case progressed with less irritation than common. This mode of extension was also employed in France by Seutin, and has been still more recently revived in New York by Drs. Buck and Swinburne. I have lately treated several fractures in this way at the Massachusetts General Hospital, as have other surgeons of that institution, and with excellent results. For fracture of the neck of the thigh-bone, it is one of the best methods in use. Counter-extension, by a perineal strap, may often be employed with advantage; or a similar end may be attained by raising the foot of the bed a few inches by bricks or pieces of plank placed under the legs. The great advantage of this treatment consists in its leaving the limb open to constant inspection, and keeping the injured parts free from all irritating pressure from splints and bandages. Eversion is

prevented by placing bags, filled with sand, by the side of the limb. In very old and feeble patients, who frequently cannot bear even this slight restraint, the double-inclined plane or fracture-bed is to be preferred to any other apparatus.

Transverse fracture of the patella, attended, as it often is, by great separation of the fragments, may be most successfully treated by position alone. This I tried at first with the body slightly bent, and the limb raised at a large angle from the bed. The effect, however, of this constrained position, was that the patient constantly endeavored to escape from it: I was therefore led to place the limb perfectly flat on the bed, which I found to answer better than the theoretical posture, devised with the idea of more perfect muscular relaxation. The old methods for confining the upper fragment by bandages are always inefficient unless aided by a correct position of the limb, and are useless with it. They give rise to great swelling and much needless suffering, besides actually deranging the fragments by so tilting them as to prevent their proper approximation.* By the use of the ingenious steel hooks of Malgaigne, it is claimed that a still more accurate adjustment of the parts may be secured; but the plan has found little favor in this country.

The excellent results which we now obtain in the treatment of fracture of the thigh by extension, are due in a very great degree to the introduction, by

* The effect of bandages, in tilting the fragments, is well shown by specimens in the valuable cabinet of the Boston Society for Medical Improvement, under the care of Prof. J. B. S. Jackson.

Dr. Crosby, of Manchester, N. H., of extending straps of common adhesive plaster, as a substitute for the painful and inconvenient methods with bandages, or the gaiter or handkerchief.

Fracture of the clavicle is perhaps one of the commonest of the injuries to bones, and is one of the most troublesome to treat with the old complicated apparatus. When students, we were taught to apply Desault's bandage, which consists of eighteen yards of roller, confining the arm in every conceivable way, and frequently torturing the patient in addition by firm pressure upon one or the other of the fragments at the seat of the injury. Many years ago, I brought Dr. Fox's simple apparatus from Philadelphia; and it was immediately introduced into the hospital, where it has been used ever since with some slight modifications. It consists, essentially, of a pad for the axilla, and a bag for the arm slung from the opposite shoulder. Many cases of this fracture do well without especial treatment; and we often see it already in a fair way of recovery in children brought to us for supposed lameness of the shoulder resulting from a fall a week or two before. In bad cases, where there has been much injury and swelling of the soft parts, or where one of the fragments has been driven down by the blow, so as scarcely to be detected by the most careful examination, on confining the patient to his back in bed, I have often seen the broken end rise up, as it were, and finally assume nearly as good a position as in the case of a simpler injury treated by the most complicated apparatus. With the exception of some

occasional deformity, the results of fracture of the clavicle are almost always favorable. In the very large number of cases which have come under my notice, I have never known union to fail except in one instance,—that of a sailor severely injured at sea by a fall from the mast, and not subjected to treatment; the blow, in this case, being a direct one, at the seat of fracture.

Fracture of the lower third or small part of the leg is often very vexatious to manage, owing to a projection of the tibia, which often takes place, and is attended with more or less deviation of the leg from a straight line; thus giving rise occasionally to lameness by restricting the range of flexion of the ankle-joint. This accident is best avoided by treating the leg upon a double-inclined plane, applying extension and counter-extension by means of adhesive straps fastened above to upright stanchions connected with the leg part of the apparatus, and below to the foot-piece,—an arrangement suggested by Dr. S. D. Townsend. This fracture may also be successfully treated, in some cases, with the starched or plaster bandage. A slight degree of deformity almost always follows this injury, where there has been any displacement in the beginning.

For *fracture of the fibula near the ankle*, with displacement of the lower fragment, the powerful side-splint of Dupuytren fulfils every indication.

Fracture of one of the condyles of the humerus into the elbow-joint is very apt to be followed by adhesions, and loss of motion, even under the best management. If there is no displacement of the fragment,

it is best to dispense altogether with splints, merely supporting the arm in a sling. Where splints are necessary, they should be removed at the end of ten days or a fortnight, and passive motion commenced as soon as the tendency to displacement is overcome.

Fracture of the lower end of the radius, which is of so frequent occurrence in winter from a fall on the hand, is very apt to be followed by deformity and great impairment of the functions of the part. I have of late treated this fracture almost exclusively with the simple and ingenious splint invented by Dr. Henry Bond, of Philadelphia, and described in the American Journal of the Medical Sciences for April, 1852. For facility of application and of subsequent inspection, as well as for comfort to the patient, this apparatus appears to me to offer important advantages over any hitherto invented,—not excepting the famous pistol-shaped splint of Nelaton.

Of modern appliances for the treatment of fractures, the *starched bandage* of Seutin, or, still better, the dextrine bandage of Velpeau, or the plaster of Paris apparatus, is one of the most important. There are, in fact, but few cases of fracture in which this apparatus is not useful at some stage of the treatment. In simple fractures, where there is not much injury of the soft parts, it may often be applied with advantage immediately upon the receipt of the injury. In other cases, it is necessary to wait until the swelling and inflammation have subsided. After union has been effected by the use of other appliances, the starched or dextrine bandage is very useful in sup-

porting the newly-formed callus, and guarding the limb against accidents when the patient leaves his bed.

The application of these bandages is very simple. A common roller is to be passed through the adhesive liquid, either starch paste, or solution of dextrine, and is then to be applied to the limb in the ordinary manner, taking care to make as few reverses as possible. A dry roller of old linen or cotton should be first applied, to prevent adhesion of the bandage to the skin. The dextrine solution, which may be made in part with alcohol, dries sooner than the starch, and makes a firmer case with the same thickness of roller. If starch is used, the whole should be strengthened by strips of wet pasteboard, placed on the outside of the dry roller before applying the starched one.

The *plaster apparatus* consists, first, of a soft roller or a thin layer of cotton, applied next to the skin, and covered by a second roller, wet with water. The whole bandage is then covered with plaster mixed with water to the consistency of cream, and confined, if necessary, by another roller. The surface of this may be smoothed with a little more plaster, applied with the palm of the hand, and the whole apparatus completed by a coat of shellac varnish. This apparatus is easily applied, and becomes perfectly solid in the course of the short time required for its application. The plaster should not be wet until the moment it is to be used; and, if it still sets too quickly, a little alum water may be added.

The starched bandage may be employed with

great benefit in those very vexatious and often unmanageable injuries, — sprains of the ankle; thus allowing, in some cases, of locomotion at once, where a very tedious confinement would be necessary under other treatment. I have also employed it with excellent results in that very troublesome disease, milk abscess; also in swelled testicle, in which its success is superior even to strapping with adhesive plaster.

In oblique fractures of the femur,—except, perhaps, in very young children,—more or less *shortening* always remains, even under the most skilful treatment. Cases are often shown of limbs in which it is claimed that shortening has been wholly prevented; but, on careful measurement, I have never failed to detect it. It is, however, generally so slight as to be of little consequence,—frequently not exceeding a quarter to a half inch; in which case it is completely compensated by a deviation of the pelvis.

The *time required for the union of a fracture of the thigh* is generally stated at six weeks; but it by no means follows, that, after this interval, the callus has become sufficiently consolidated to admit of any use of the limb in standing or walking. In fact, the too early use of a fractured limb is often followed by a gradual bending of the newly-formed bone; resulting, sometimes, in considerable distortion. If, for any reason, it is thought proper to allow the patient to rise from his bed at this stage of the cure, the limb should always be supported by splints; or, better, by a starched or plaster bandage.

Angular distortion, after fractures, should be treat-

ed, as soon as discovered, by gradually increased pressure, applied by means of a straight splint and a roller or adhesive straps. It is worthy of remark, that very great deformity may be corrected in this way, in young persons, even long after the receipt of the injury.

A single word may be said upon *fractures of the skull with depression.* The present rule in surgery is, in case of simple depression of the skull, uncomplicated by a wound of the integuments, and without cerebral symptoms, not to interfere with the fracture; and the same rule has been applied to many cases of compound fracture, where, for the moment, the brain appears not to be affected. Serious accidents may occur in these patients at a period more or less remote from that of the injury. Some are affected with chronic headache; and many, after the lapse of a year, or much later, suffer from epileptic convulsions, which render their lives miserable. The great mortality of operations on the skull, performed to elevate depressed bone after accidents, has led, perhaps, to the extreme of conservative practice, which may possibly be modified by future experience.

DISLOCATIONS.

In following the wards of Lisfranc, in Paris, I was struck by a number of cases of injuries of the shoulder-joint, which he considered anomalous, and which were supposed to be partial dislocations of the shoulder. These patients had all received their injuries by a blow upon the joint itself: the head of

the humerus seemed to be displaced slightly forward, or as if on the edge of the glenoid cavity. The head could be easily replaced by a slight effort, but at once resumed its former position when abandoned to itself.

Some time afterwards, I observed, in the "Medico-Chirurgical Review," a drawing of a case which had been considered one of partial dislocation, but in which it was shown that the front part of the socket had been broken off; thus allowing a slight displacement of the head of the humerus forward, and ending in the formation of a new socket a little in front of the old one.

About this time, a sailor was brought into the Massachusetts General Hospital, who had fallen from the mast of a ship, and had received fatal injuries. Among others, there was apparently a partial dislocation of the shoulder. On examination, a distinct ecchymosis was found on the external aspect of the joint; and the front part of the socket had been broken off, so that the head of the humerus lay partially below the coracoid process.

During several years in practice, before I fully understood the nature of the accident, I was much struck by observing cases of dislocation of the shoulder, in which, after reduction by the usual methods, the bone showed a remarkable tendency to return to its original state of displacement. In all these cases, I found, on a strict examination of the patient, that the injury had been inflicted by a blow upon the joint itself. Latterly, I have constantly met with cases of recent dislocation which have been brought into the

hospital on account of the supposed failure to effect reduction, but in which the real difficulty lay, not in replacing the bone in its socket (which was very easily effected), but in retaining it there after the removal of the artificial supports. All these cases are, in fact, fractures of the edge of the socket, caused by a blow received on the shoulder; and I am almost prepared to say, that a simple dislocation of the shoulder, and I may also say of the hip-joint, never occurs from a direct blow on the part. I certainly have never seen it myself, nor have I seen it satisfactorily described by others.

This fact is one of considerable practical importance. When a patient comes under our notice with a dislocation of the shoulder-joint, he may be asked in what manner the injury was received. If by a blow on the shoulder, a bruised spot will generally be found; and if an ecchymosis also appears within a short time, either in front of the joint or along the side of the arm, the diagnosis of fracture of the socket may almost certainly be made. If, on the other hand, the patient has received the blow on the hand or elbow, with the limb, at the same time, more or less extended from the thorax, we may expect to find a simple dislocation; or, if there has been great violence, we may possibly find it complicated with fracture of the neck of the humerus. Impacted fracture of the head of the humerus, occurring from a blow on the shoulder, is the only injury likely to be mistaken for the so-called partial dislocation just noticed.

The most important part of the treatment of dis-

location of the shoulder with fracture of the socket consists in retaining the parts in position after they have been reduced. This object is well attained by the use of Fox's apparatus for fractured clavicle; the wedge-shaped pad in the axilla preventing the reproduction of the dislocation. In old cases, with complete displacement, considerable force is often required to break up adhesions, which are generally more tenacious than in cases of simple dislocation; probably on account of the additional inflammatory action consequent upon the fracture of the socket. Greater care and a longer persistence in the use of mechanical means are also necessary to retain the head of the bone in its place while the new socket is in process of formation. In fact, I have seen the head of the bone displaced by a slight pressure with the thumb while being examined after reduction, the arm being at the time firmly bandaged to the body,—an occurrence which would be hardly possible in a simple dislocation.

I have had to treat several cases of *dislocation of the shoulder, with fracture of the neck of the humerus.* In two instances in which I was called while the muscles were still relaxed, and before the patient had recovered from the depressing influence of the shock, it was found possible to effect reduction by making extension of the shaft of the bone, at the same time working the separated head into its socket by firm pressure with the thumbs. In case reduction cannot be thus effected, it is still a question, whether the shaft of the bone should be carried

back into the old socket, so as thus to make at once the best practicable joint; or whether it should be placed in apposition with the head, and an attempt made at reduction after such a lapse of time as may be thought sufficient for the union of the fragments to take place. The latter method was tried with success, by Dr. John C. Warren, on a young man, whose case he reported in the "Boston Medical and Surgical Journal" for 1828. Immediate reduction having been attempted in vain, fracture-apparatus was applied. After seven weeks, extension was made with pulleys, and the dislocation reduced. This case is reported by Malgaigne, who considers the precedent worthy to be followed in similar cases. I also attempted the same treatment in a case which occurred nearly twenty years ago; but, in the attempt to break up the adhesions which had formed during the six or eight weeks that had elapsed, the callus gave way, and the fracture was reproduced. The broken end of the bone was then placed in the glenoid cavity, and the patient recovered with a very useful arm. In another case which has lately come under my notice, the arm had been paralyzed by fruitless attempts at reduction. I saw the patient, in consultation with other surgeons, at the end of seven weeks; when it was decided to leave the broken end of the bone in the socket. I afterwards learned that the paralysis was gradually passing off, and that the patient is now recovering the use of his arm.

Dislocation of the hip-joint, so far as my own observation goes, may take place upon almost any part of the pelvis. During an attempt at reduction, made under ether, I have seen almost every kind of displacement imitated. In the course of my practice, I have seen three cases of dislocations downwards and backwards; one of them in a boy of six years of age, which is the youngest patient in whom I have ever seen dislocation of the head of the femur. I have met with a dislocation of one thigh into the foramen ovale, the other thigh being dislocated upwards at the same time, with incomplete fracture of the neck of the bone; the fractured portions separating, just as the head had been restored to its place in the socket.

I have only once seen a *dislocation of the hip in the female*,—a patient who came into the hospital during the past year, under Dr. Cabot, who reduced it; and I believe that there is but one such instance recorded in the work of Sir Astley Cooper on this subject. The rarity of this dislocation in women is a fact of great importance in distinguishing between fractures, and displacements of the head of the thigh-bone.

It is well known as one of the diagnostic marks of fracture of the neck of the femur, that the foot is turned outwards, and the limb shortened. In dislocation on the dorsum ilii, the limb is turned inwards, with a like shortening. In opposition to this, I would mention the fact of having seen a fracture of the neck of the thigh-bone in an old lady over a hundred years of age, and have now the specimen in

my possession, in which the toes were turned inwards, the fragments having become partially interlocked in that position. I have also observed, in the course of the reduction of a dislocation on the dorsum, the toes become everted; the head of the bone taking a position in front, so as to present most of the appearances usually given by a fracture of the neck of the bone.

The use of ether has made a very great change in the practice pursued in the treatment of dislocations of the hip, which can now be very frequently reduced by manual assistance only; thus enabling us in many cases to dispense entirely with pulleys, and, by successive movements of flexion, abduction, and rotation, to restore the head of the bone to its socket with a facility truly astonishing. The *rationale* of this mode of reduction has been lately very satisfactorily explained before this Society by the Professor of Surgery in Harvard University, who has shown, by specimens and dissections, the very important part borne by the great ilio-femoral ligament in the mechanism of the various dislocations of this joint.

I will mention a case of *dislocation with supposed fracture of the acetabulum*, which is interesting from its important bearing on the question of the dislocation recurring from a very moderate movement of the bone afterwards. It occurred in a powerful man, who was run over by his own cart, the hip being dislocated by the knee coming forcibly in contact with the bottom of the cart, while the pelvis rested on the ground; the limb, of course, at the time of the accident, being at a right angle with the body.

He was brought to the hospital, and an upward dislocation detected, which was reduced after the usual manipulation, and extension by means of pulleys. On lifting the limb a few inches from the table, the head of the bone again flew out from its socket, and was reduced with even more difficulty than at first. I requested my colleague, Dr. Townsend, to verify this fact. The patient was desirous of leaving the hospital, which I strongly advised him not to do. The limb was confined, and treated with great care; but, at the end of about four weeks, he arose from his bed without permission, and stood on the injured limb, at the same time twisting his body upon it, forcing the bone again out of its socket, and causing considerable suffering. Much cartilaginous crepitus was heard while the limb was being restored to its place. The accident recurred a third time, from his flexing the limb too strongly in bed. He now had a starched bandage firmly applied both to the hip and to the lower extremity; and, after a confinement of several months, he recovered. In this instance, if the patient had returned home, and the dislocation had recurred during any extraordinary movements, made, perhaps, during sleep, it might easily have been urged against the surgeon, that the dislocation had never been reduced.

AMPUTATIONS.

The question of *points of election* for the performance of amputation has been re-opened within the past few years, and the rule of practice materially changed from that even now taught in some of the

approved European text-books. The old rule of amputating the leg within a few inches of the knee, for an injury, perhaps, of the ankle, has given place, in this country at least, to the much safer and in every respect better practice of saving as much of the limb as possible. This reform is due almost wholly to the invention of the improved conical socket, now so universally employed in modern artificial limbs, in which the weight of the body is sustained by the accurate adjustment of the tapering sides of the stump to the corresponding cavity made to receive it, while the sensitive cicatrix is effectually relieved from pressure.

The advantages of *immediate amputation* are perhaps now more fully recognized than ever before. Even during the period of depression or shock, where it would formerly have been thought necessary to wait for re-action, we now feel justified, in most cases, in proceeding at once to the operation; having learned by experience that the inhalation of ether is generally attended by a greater and more rapid restoration of the vital forces than that which follows the exhibition of alcoholic stimulants. By operating at this time, many a patient may be saved, who would otherwise die from the gradual loss of blood, and from the nervous irritation dependent upon extensive injury.

The kinds of operation which have generally been preferred in this vicinity are the circular for limbs with a single bone, and the flap for the fore-arm and leg. The introduction of the operations of Messrs. Syme and Pirogoff, for saving as much as possible

of the lower extremity, and as substitutes for amputation in the leg, are well worthy of adoption in suitable cases.

Amputations and excisions are now being fully tested in all their varieties in the great field afforded by the present war. One amputation—*that at the hip-joint*—may be particularly mentioned, on account of its striking want of success. Out of twenty-three operations mentioned by Macleod as having been performed in the Crimea, all proved fatal; and thus far, during the present war, I have not heard of a single successful case. It has been thought safer, therefore, to leave a man, with a compound comminuted fracture high up in the thigh, to the chances afforded by nature, rather than to perform the amputation now under consideration.

I have had an opportunity of twice performing this amputation in Boston. One case was in a child whose limb was partially torn off by a railroad accident; the other was for a large tumor of the femur, which reached high up into the groin. The first patient died at the end of a fortnight, without evident cause, when apparently in a fair way of recovery: the other recovered. The method adopted in the last case was by making anterior and posterior flaps of integument; tying the femoral artery before making the section of the muscles.

It may be interesting to refer to the mortality, after large amputations, as shown in the statistics of the Massachusetts General Hospital during forty years; comparing them with some lately collected abroad.

LIST OF MAJOR AMPUTATIONS PERFORMED AT THE MASSACHUSETTS GENERAL HOSPITAL FROM 1822 TO 1850.

First.—Cases from 1822 *to* 1850 (*reported by Prof.* GEO. HAYWARD).

Thigh,	88	recovered,	69	died,	19	. . Per cent of deaths,					21.6
Leg,	60	"	50	"	10	. . "	"	"	"		16.6
In lower extremity,	148	"	119	"	29	. . "	"	"	"		19.6
Arm,	12	"	11	"	1	. . "	"	"	"		8.3
Fore-arm	13	"	11	"	2	. . "	"	"	"		15.4
In upper extremity,	25	"	22	"	3	. . "	"	"	"		12.0

Total from 1822 to 1850, 173; recovered, 141; died, 32: per cent of deaths, 18.5.

Second.—Cases from 1850 *to* 1860 (*collected by Dr.* BENJ. S. SHAW).

Thigh,	86	recovered,	67	died,	19	. . Per cent of deaths,					22.1
Leg,	84	"	60	"	24	. . "	"	"	"		28.6
In lower extremity,	170	"	127	"	43	. . "	"	"	"		25.3
Arm,	19	"	16	"	3	. . "	"	"	"		15.8
Fore-arm,	18	"	17	"	1	. . "	"	"	"		5.5
In upper extremity,	37	"	33	"	4	. . "	"	"	"		10.8

Total from 1850 to 1860, 207; recovered, 160; died, 47: per cent of deaths, 22.7.

Total of Cases from 1822 *to* 1860.

Thigh,	174	recovered,	136	died,	38	. . Per cent of deaths,					22.8
Leg,	144	"	110	"	34	. . "	"	"	"		23.6
In lower extremity,	318	"	246	"	72	. . "	"	"	"		22.6
Arm,	31	"	27	"	4	. . "	"	"	"		12.9
Fore-arm,	31	"	28	"	3	. . "	"	"	"		9.7
In upper extremity,	62	"	55		7	. . "	"	"	"		11.3

Total of amputations (except of hip and shoulder), 380; recovered, 301; died, 79: per cent of deaths, 20.8.

Amputations at Hip and Shoulder Joints from 1850 *to* 1860.

Hip,	2	recovered,	1	died,	1	. . . . . Per cent of deaths,					50.0
Shoulder,	16	"	10	"	6	. . . . . "	"	"	"		37.5

In a paper published by Mr. Callender, the mortality, after all amputations, at St. Bartholomew's Hospital, London, is given as follows:—

Total, 358; recovered, 284; died, 74 . . . . Per cent of deaths, 20.7

Dr. Norris, in the "American Journal of Medical Sciences," July, 1854, gives the following statistics of amputation at the Pennsylvania Hospital, before 1850:

Total, 196; recovered, 148; died, 48 . . . . Per cent of deaths, 24.5.

Dr. Simpson, in his lecture published in the "Medical Times and Gazette," Feb. 6, 1864, quotes the following:—

Out of five hundred and twelve amputations of the thigh, leg, arm, and forearm, performed in the Parisian hospitals from 1836 to 1841, and collected by M. Malgaigne, two hundred and eighty-one proved fatal. In other words, fifty-five out of every hundred thus operated upon died.—*Archives Générales de Médecine*, tome 58, p. 389.

Out of two thousand and forty-six similar amputations occurring in British hospitals and in private practice, collected by Dr. Fenwick, five hundred and twenty-four proved fatal. In other words, nearly twenty-six in every hundred thus operated upon died.—*Monthly Journal of Medical Science* for October, 1847, p. 238.

Dr. Fenwick has collected together, from civil and military practice in Great Britain, America, and France, a list of four thousand nine hundred and thirty-seven amputations of large limbs. Of these patients, a thousand five hundred and sixty-five died, or nearly thirty-two in a hundred.

EXCISION OF JOINTS.

The excision of diseased joints, as a substitute for amputation, which was revived a few years ago by Mr. Syme,—more particularly for the elbow and shoulder,—has lately been practised on most of the larger joints of the body, and has passed into surgery as one of the established operations. The excision of the knee, in particular, has been much more frequently performed than that of any other large joint; the diseases which, in civil practice, require surgical interference, being much more frequent in the case of the knee than of the elbow. By this operation, many limbs, which would otherwise be condemned to amputation, are saved, and made useful to the patient. Excision is, of course, applicable only to cases in which the limb is otherwise sound, and the movements of the hip and an-

kle unimpaired. Performed upon adults, it already counts a great number of most admirable results: but, in the case of young children, a very grave objection has arisen from the fact that in several instances, at first reported as successful, the growth of the limb has been arrested; leaving it, at last, many inches shorter than its fellow. There is no doubt, that, if the epiphyses of the bones are wholly removed, the subsequent growth is more impaired than when they are preserved. It is therefore proper, in children, to pare off from the articular surfaces as thin a slice as is consistent with the removal of the diseased bone and the whole articular cartilage. In one case in my own practice, in a little girl of about eight years of age, an entirely useless and bent-up limb, the result of scrofulous white swelling, was made serviceable by removing the ends of the bones, and straightening the joint. I saw this patient, at the end of three years, perfectly well, and walking with a slight limp. The limb was shorter than the other; but the pelvis had so adapted itself as to make the loss of length less evident than might have been expected.

I have performed excision of the knee-joint three times with most gratifying success. In a fourth case,—that of an adult female,—which, from the first, seemed a less promising one for the operation than the others, amputation was afterwards necessary.

In two or three excisions of the shoulder-joint for caries, the results have all been successful.

The advantages of excising the head of the humerus and the articular surfaces entering the elbow-

joint are undoubted. The decision in the case of the knee-joint can be hardly yet considered as finally made.

CANCER.

The question of the removal of malignant tumors by surgical operation has been a subject of discussion from the time of the father of medicine. It was the opinion of Hippocrates, that the disease had much better be left to itself; and that the patients died sooner when the attempt was made to remove it, than when it was allowed to pursue its natural course. The same views, substantially, have been held, until within a few years, in England and the United States.

In a report made to the American Medical Association in 1852, supported by cases which had occurred in my own practice, I felt justified in drawing the following conclusions: first, that, in a certain number of cases, cancerous tumors, once removed, do not return; secondly, that, in certain other cases, the patient, after an immunity for a longer or shorter period, has a return of the disease, requiring a second operation, which sometimes proves successful; thirdly, that although, in a great proportion of cases of extirpation, the disease returns, either in the neighborhood of the wound or in some internal organ, yet, even under these circumstances, it generally re-appears in a less loathsome form, and is attended with much less suffering, than if the original local disease had been allowed to proceed to a fatal termination; fourthly, in consequence of the immu-

nity from pain afforded by the use of anæsthetic agents, one of the most serious of the old objections to extirpation no longer exists.

After an experience of ten years since this report was made, I feel even more fully convinced of the propriety of removing cancer,—particularly of the breast,—except in cases of marked impairment of the health from the disease, or when there is evidence of decided constitutional infection; and this opinion would be justified, even if we admit that the disease is never really destroyed by surgical removal. I am fully confident, however, that, in a certain number of instances, the disease is radically extirpated by the operation. There are still living, and in good health, several patients upon whom I operated for undoubted malignant disease ten or fifteen years since. I have also a patient, now in a state of perfect health, in whom the disease occurred five separate times within two years, and was as often removed; the last time, more than two years ago. In another case, operated on in 1859, in which a large scirrhous tumor of the breast was rapidly approaching the surface, the whole disease was removed, and the patient recovered her health. At the end of eighteen months, a tumor appeared in the axilla; which, after attaining the size of an apple, was enucleated from among the great vessels and nerves. At the end of a year, a hard tumor, imparting almost a bony sensation, appeared near the spinous process of one of the dorsal vertebræ: this was also removed; and the patient finally died, with cerebral symptoms, four years after the first operation. During

all this period, she was cheerful; and most of the time was able to take long journeys, and to enjoy the society of her friends: the question of cancer was never mentioned between herself and her surgeon. This is an extreme case; and perhaps some might question the choice between a large ulcerated sloughing cancer, and the alleviation, both mental and physical, afforded by an operation. In regard to the propriety of operating for the removal of epithelial cancer, of course there can be no question; cases of cancer of the lip and of the face being of constant occurrence, in which there has been no return of the disease even after the lapse of many years after removal.

The *cancers of the breast*, which, according to my experience, have been the most painful, rapid, and least amenable to surgical treatment, are those *developed during lactation;* and they often occasion great embarrassment in diagnosis. The breast swells, becomes indurated, and gives all the appearance of an obstruction in the lactiferous ducts: in spite of remedies, however, the hardness increases; the skin becomes rough and brawny, and the whole organ solidly fixed to the ribs; cancerous tubercles appear in the vicinity, and the patient often dies with either cerebral or spinal symptoms. The wound made by the removal of a tumor of this kind is very large, involving, as it does, the loss of the whole integument over it. I have once or twice operated for this disease,—at the earnest solicitation of the patient, on account of intense pain,—dressing the wound

afterwards with flour; which I had first seen used for a similar purpose, in this city, by the late Prof. George Hayward, and which avoids the necessity of subsequent exposure to the air during the dressings.

It is not unworthy of notice, that in removing large tumors on the left side of the chest, over the region of the heart, great depression of the vascular system, attended with symptoms of collapse, is often seen to occur from the exposure of the large surface to the air; the symptoms disappearing as soon as the wound is covered. I have therefore made it a rule, while the vessels are being secured, to expose only as small a portion of the wound as is absolutely necessary.

The question of the *destruction of malignant disease by means of caustics* is one of much interest, the practice having found both advocates and opponents among men most distinguished in the surgical art. Great mischief is done in this way by charlatans, who make use of caustics for the destruction of all kinds of tumors, innocent as well as malignant, whose removal they would never dare to attempt with the knife. The chief objection to the use of caustics, in all but a few exceptional cases, is the extensive destruction of integument, which often renders the cure very slow and imperfect. In cases of small or superficial cancers, especially of the epithelial variety, caustics sometimes answer a good purpose; but if the tumor is large, or deeply seated, the process is both tedious and disgusting. If inefficiently employed, they appear to do great harm by stimulating the growth to increased action.

The most efficient caustic, perhaps, is the chloride of zinc, made into a paste with flour, and planted well down into incisions made with the knife. Another, advocated by Velpeau, and I believe also by Mr. Syme, consists of strong sulphuric acid, mixed with charcoal or some vegetable powder.

In connection with the etiology of cancer, I would say, that I have had several well-marked cases, in which the diathesis was evidently awakened by a blow; the patient subsequently dying of malignant constitutional disease.

PLASTIC OPERATIONS.

It was my good fortune to witness a very large number of plastic operations by the distinguished M. Dieffenbach, of Berlin, at the time of his visit to Paris in 1834. By invitation of the leading French surgeons, he gave a most instructive exhibition of his great skill in restoring lost portions of the face, especially the nose; operating, during many days in succession, upon large numbers of patients, collected for the purpose from the various quarters of Paris: thus performing, in the course of a few weeks, a greater number of these then novel operations than most surgeons would ordinarily see in a lifetime. His rhinoplastic operations were all performed by the Indian method, in which the material for the new nose is taken from the forehead.

Soon after my return home, I had an opportunity of performing several operations for the restoration of the nose; employing, in one case, the *Taliacotian*

or Italian method, in which the nose is formed from the integument of the arm; and, in another case, taking the requisite material from the fore-arm. (I refer to these cases as being the only ones ever attempted in this country; and with the exception, perhaps, of one or two instances in Germany, almost the only successful ones since the time of the inventor.) The *Indian* method I have very frequently employed; in most cases, with excellent results. The scar left on the forehead is much less conspicuous than might be expected; and the great suffering to the patient, which results from the confinement of the arm to the head in the Italian method, is avoided. The principal inconvenience which I have observed in these operations depends upon the fact, that the material for the septum, and often of the tip of the nose, must be taken from the scalp. The consequence is, that the hair continues to grow upon these parts; requiring frequent shaving, or extraction with forceps. Depilatories I have often tried, but have never found that they produce more than a transient effect.

One of the most important applications of plastic surgery is in the *treatment of contracted cicatrices* following severe burns, or extensive destruction of integument from other causes. In these cases, mere division of the cicatrix is of no permanent benefit; but by the total removal of the diseased tissue, and the transplantation to its site of a flap of sound skin, the use of the part is often completely restored. After the removal of cancerous growths, also, it is often highly advantageous to fill the opening by

means of a flap of sound integument, instead of waiting for the slower and less perfect cure by cicatrization.

OPERATIONS FOR FISSURE OF THE SOFT AND HARD PALATE.

The operation for fissure of the soft palate was first successfully performed by Roux, in 1819; and shortly after, in this city, by Dr. J. C. Warren, with whom, also, the idea was original. After the publication of M. Roux's cases, it appeared that a similar but unsuccessful attempt had been made two years before by Graefe; who, however, contented himself with freshening the edges of the fissure by caustic, instead of by cutting instruments, as employed by Roux and his successors. The simple fissures of the soft palate, to which alone the original operation was considered applicable, do not probably exceed one-tenth of the whole number of cases of cleft palate; and are, of course, those in which the need of relief by an operation is least urgent. M. Roux soon attempted to extend the application of his operation to cases of more extensive fissure by cutting away the soft from the hard palate at the posterior margin of the palate-bones, and so effecting the somewhat more perfect co-aptation of the margins of the fissured velum, but leaving a large triangular hole in front still unfilled. This operation was apt to fail, owing to the division of the vessels which nourish the flap; and was never very generally adopted by operative surgeons.

The idea had early occurred to me, that, in these

cases, a much more perfect operation might be performed by dissecting or peeling up the soft tissues from the roof of the mouth, and thus making a continuous flap, extending from the anterior extremity of the fissure in front to the tip of the uvula behind. This operation I performed with success, and published several cases in the "New England Quarterly Journal of Medicine and Surgery" for April, 1843, and in the "American Journal of the Medical Sciences" for the same year. Another even more important improvement, which I introduced and published at the same time, was the division by the scissors, first, of the posterior pillar of the palate, which is made up chiefly of the fleshy fibres of the palato-pharyngeus muscle; and, secondly, of the superior palatine muscles,—the tensor and levator palati,—which, on stretching the palate, are felt in bold relief above and behind the velum. By the division of these parts, the velum is perfectly relaxed; thus immensely facilitating the subsequent stages of the operation, and relieving the stitches from all injurious tension. The operation, as thus improved, has become one of very frequent performance, and of great certainty in its results.

Of late years, in consequence of the improvements which have been made in the art of mechanical dentistry, I have, for the most part, ceased to operate for the closure of the anterior part of the fissure; contenting myself with the establishment of the arch of the soft palate, and perhaps also covering the fissure in the bones as far forward as the point of junction of the maxillary with the palate bones. In

these cases, it is, of course, necessary to complete the roof of the mouth by means of a plate of gold or other suitable substance; but this inconvenience is more than compensated by the diminished severity of the operation.

The great object aimed at in these operations is to establish the arch of the soft palate. If this is effected, a good result may be confidently predicted as soon as the remaining fissure is covered by the gold plate, and the patient has learned to use his newly acquired organ in articulation. If, however, the union fails at the posterior part of the line of suture, so as permanently to leave even a slight fissure there, the cure will be more or less imperfect.

I have now operated about ninety times for cleft palate; and, with the exception of perhaps half a dozen cases, I have never failed to get more or less union of the soft parts; and it is a remarkable fact, that, in the most extreme cases of very wide fissure, the operation has been as successful in improving the voice as in cases of the simplest character confined to the soft palate only. The most essential point is, I am sure, to establish the velum throughout the greatest possible extent; and just in proportion as this end is attained will be the degree of perfection with which articulation will be finally performed.

OPERATIONS FOR HARE-LIP.

The proper time and the best method of operating for this deformity are still open questions in surgery. It was the opinion of Dr. John Warren, that

the operation should be performed at a very early period; and the same practice was strongly advocated by Dr. A. L. Peirson of Salem, who published a paper upon the subject. I have often done it within twenty-four hours after birth, putting the child to the breast as soon as the mother's milk is secreted. The act of sucking in no way interferes with the co-aptation of the parts, but rather contributes to their more perfect apposition. Two or three days after birth, a peculiar hemorrhagic tendency is frequently observed, accompanied by an icteric hue of the skin, which passes off in the course of a fortnight. If, therefore, the operation is delayed beyond forty-eight hours, it should be postponed for two or three weeks longer, or until the processes of digestion and nutrition have become well established. Before I commenced practice, the figure-of-eight suture, with pins, was in general use in this vicinity, causing much irritation, and thus often defeating the objects for which it was employed. I early adopted the plan of using simple sutures instead of pins; and either made no application to the wound, or dressed it with a bit of wet lint. I also introduce a single stitch on the inner edge of the lip, cutting the ends very short. Plasters and bandages I have entirely given up, as causing irritation, and confining foul secretions.

The plan of keeping the child at the breast during the period while union is taking place, I consider a very great improvement over the old practice of feeding; preventing, as it does, that disturbance in the digestion which so often proves fatal to the adhesive process.

VESICO-VAGINAL FISTULA.

The treatment of this affection, which had, until very recently, been almost wholly confined to the simplest cases, has been lately revived in this country with remarkable success, especially since the publication, by Dr. Sims of New York, of a number of very successful cases, in which he attributed the good result to the employment of sutures of silver wire. For a time, metallic sutures were held in high estimation, and were employed in almost all departments of operative surgery; but a more extended trial has failed to demonstrate that superiority which was claimed for them over silk or linen threads, and the greater inconvenience which attends their employment has already led to their abandonment by some of the best surgeons.

The real improvement in this operation, and that which has been the means of bringing it into so general use, is the very free dissection of the vaginal mucous membrane from the old cicatricial tissue and from the walls of the bladder: by this plan, the stitches are effectually relieved from tension, and the results are generally favorable.

In many cases of this disease, we find the os uteri, and sometimes the upper part of the vagina, completely obliterated; causing retention of the menstrual fluid. I have watched a number of cases of this kind, and have always observed that relief is ultimately obtained, often after great suffering, by the formation of a fistulous opening communicating with the vagina, or, very rarely, with the bladder.

In quite a large number of operations which I have performed for vesico- and urethro-vaginal fistula, as well as in all that I have done for cleft palate, I have always used sutures of common surgeon's silk, and have had every reason to be satisfied with the results.

Few surgical diseases are more distressing to the patient than vesico-vaginal fistula, and no operation better rewards the skill of the surgeon; rescuing the sufferer, as it does, from a state in which existence has become a burden, and restoring her once more to the world and to the enjoyments of social life.

HIP AND SPINAL DISEASES.

The present improved method of treating hip and spinal diseases may be adduced as one of the greatest triumphs of the modern school of pathology. Hip-disease, as every one knows, was formerly treated almost exclusively as a local inflammation; and the patient was confined to his bed, tormented in turn by the severe pain caused by every motion of his diseased joint, and by an appalling routine of leeches, cups, blisters, setons, and issues. Dr. Physick, of Philadelphia, demonstrated the great importance of rest; which he secured by means of the "carved splint," accurately fitted to the hip, and confined by bandages. The carved splint is, however, an expensive appliance, requiring, as it does, to be made expressly for the case in which it is to be employed. The full benefit, therefore, of this treatment was only realized after the introduction of splints of gutta percha, at our hospital, some ten or twelve years

ago. The rest thus secured by the immobility of the apparatus affords immediate relief from pain, and, with the aid of baskets which I have had made for the purpose, admits, even in bad cases, of the patient being readily carried into the open air, or even transported to great distances. The very recent invention of the improved instruments of Drs. Davis and Sayre, which, in many cases, admit of a moderate degree of locomotion, has given a new impetus to the treatment of this disease, avoiding, in even a greater degree than before, the injurious confinement in bed to which the patient was formerly condemned. The constitutional treatment must, of course, be directed to the preservation of the strength during the course of a long and tedious disease; and it is by the mechanical appliances just mentioned that we are enabled to avail ourselves of the inestimable benefits of fresh air and gentle exercise, so essential to the maintenance of health both of body and mind.

Caries of the spine naturally falls into the same category as hip-disease: mechanical support should be given to the back, in order to prevent the breaking-down of the diseased vertebræ from the weight of the upper part of the body: the patient is thus enabled to move about, and preserve a fair degree of health during a long and trying disease.

Many affections of the knee, and other large joints, are to be treated according to the same principle; sustaining the system by invigorating remedies, and securing immobility of the diseased joint by proper mechanical appliances.

It is still a question, how far we can safely venture in attempting to destroy the adhesions, and consequent immobility, caused by disease of the hip and other large joints. Some experiments have been tried, with a view to deciding this point; but the rule of practice is, as yet, by no means settled.

TUMORS OF THE UPPER AND LOWER JAW-BONE.

Operations for the removal of large tumors of the jaws were formerly very rare, and were considered highly dangerous. By the use of improved cutting forceps, of large size, the upper jaw-bone may now be removed with but little trouble or danger; being, in fact, a less formidable operation than the excision of the lower jaw. The deformity, too, is much less than might be expected; as the cavity is, in a measure, filled by adventitious tissue. Some of the non-malignant tumors of the lower jaw, though of very formidable appearance, are best treated without removal of the bone: I refer particularly to large cystic tumors, in which the horizontal ramus and ascending portion of the jaw are expanded by the morbid growth, so as to leave but a thin shell, almost wholly destitute of osseous substance. In two of these cases, by excising a portion of the tumor within the mouth, breaking down its parietes, and keeping up a certain degree of irritation afterwards by injections, I have succeeded in overcoming the tendency to the reproduction of the cyst; and have seen new bone deposited, so as to restore the jaw for all useful purposes. Prof. Gross of Philadelphia, in his excellent work on Surgery, and Prof. March

of Albany, have also insisted on the importance of saving the jaw in this disease.

CROUP.

About twenty years ago, I was called to operate several times upon children in the very last stages of croup. Tracheotomy was performed, with immediate relief to the suffocation, and for a few days the result seemed almost miraculous; but the lungs had already become affected, and the vital powers so weakened, that the cases all terminated unfavorably. What was needed, in fact, was the earlier performance of the operation, before the system had received a fatal shock; and to this end it was necessary that not only the medical profession, but the public also, should be convinced that there is little or no danger in the operation, when skilfully performed. I have performed tracheotomy in a great number of cases, and have witnessed many operations done by others; and have never known a single instance in which death could be ascribed to it. Tracheotomy, in croup, has lately been revived by one of our number,—Dr. George H. Gay; and the practice has been successfully followed by many other members of this Society. What appears to be especially required in the after-treatment is, that the air for respiration should be kept warm and moist, and that the patient should never be left without a competent medical person in attendance to act instantly in case of a sudden obstruction of the tube. The use of ether very greatly facilitates the performance of this operation, and appears not to cause any

additional risk. For the investigation of the nature and treatment of this important disease, we are especially indebted to the labors of our late distinguished colleague, Prof. John Ware, whose admirable paper may be found among the official publications of this Society.*

VASCULAR OR ERECTILE TUMOR.

This disease has been admirably described and depicted by John Bell, who named it *Aneurism by Anastomosis.* The name, *erectile tumor*, is given to it on account of the striking analogy which it presents in structure with the erectile tissue found in certain parts of the body in man and in most of the higher animals. Erectile tumors are made up almost wholly of greatly enlarged blood-vessels; and are divided into arterial and venous, according as one or the other class of vessels seems to predominate. The arterial tumors, which are altogether the most formidable, are often of very rapid growth, and are marked by active pulsation. The venous tumors are more indolent, and often impart to the touch the feeling of a fatty growth: they may, however, be partially emptied of blood by pressure, and thus temporarily reduced in size. It is a common characteristic of erectile growths, that they become enlarged and turgid during any act which obstructs the free return of the blood to the heart,—such as coughing, crying, laughing, &c.,—contracting again to their former size when the patient becomes quiet.

* Contributions to the History and Diagnosis of Croup. By JOHN WARE, M.D. *New England Quarterly Journal of Medicine and Surgery*, vol. i. p. 193.

The treatment of small erectile tumors is very simple, and may be either by excision or by the ligature. In excising them, the absolute rule is that laid down by John Bell, — "not to cut into them, but to cut them out." In operating by the ligature, it is essential that the whole growth should be thoroughly strangulated, and that no diseased tissue be left behind. If, in the attempt to excise the tumor, it is unfortunately cut, the whole growth should be immediately included in a ligature, and allowed to come away by sloughing. I have several times treated erectile tumors of the face by repeated small cauterizations with nitric acid. I have thus succeeded in destroying the whole morbid tissue piecemeal, without the loss of substance, and consequent scar which follows excision or the ligature. Injection of the growth with per-chloride of iron has also been employed, in many cases with success; but death has occasionally resulted from the practice.

The operation for the cure of extensive disease of this kind is one of the most formidable in surgery, owing to the liability to dangerous or even fatal hemorrhage. In two cases, where large pulsating tumors occupied nearly the whole forehead and upper part of the head, I have succeeded in destroying them by a series of operations, in which the afferent vessels were obliterated by strong ligatures tied over pins passed beneath them, and thus the whole circumference of the growth thoroughly strangulated. By the application of new ligatures as often as any return of the pulsation was detected, and by the free use of styptics and escharotics, the disease was finally

extirpated. In another case, which I published about twenty years ago, I tied both the carotid arteries for an immense erectile growth which occupied the lower lip and a large part of the face and neck. The result of this operation, which was then only the third or fourth in which both the carotid arteries had been successfully tied, was perfectly satisfactory. A part of the lower lip, which had been the seat of an ulcerated and bleeding tumor, was afterwards excised without troublesome hemorrhage; and, on seeing the patient two years subsequently, the vascular tissue was found to have wholly disappeared. In a pulsating tumor of this character, occupying the palm of the hand, and held, as it were, like a ball in its grasp, the tumor gradually increased, and finally involved nearly the whole upper extremity. The limb was amputated near the shoulder, in time to save the life of the patient, although the erectile tissue had partially invaded the structure of the part, and many ligatures were required to arrest the bleeding. The specimen, which shows a direct continuity of the largely dilated arteries with the venous trunks, was beautifully injected and prepared by Dr. R. M. Hodges, and may now be seen in the Warren Anatomical Museum. I have also had lately under my care a girl, nineteen years of age, with a large venous erectile tumor, occupying nearly half the cavity of the mouth, and hanging down from the lower lip: it also included nearly half of the tongue, and at times seriously affected deglutition and respiration. I operated on this case by the ligature, tying both the tumor of the cheek and that of the tongue

on the same day. The ligatures came away at the proper time, and the result was fully successful.

I have spoken thus at length of this disease, on account of its rarity, and from the fact, that, owing to the absence of pain, it is too often neglected until it has acquired enormous proportions. In such cases, it is rarely to be cured by a single operation, but requires a patient and persevering use of needles, ligatures, caustics, and sometimes, although very rarely, the knife, before it can be completely extirpated.

A word may be added upon the treatment of *aneurism* by compression, which has been lately practised with success in many formidable cases, which must otherwise have been submitted to the severe and dangerous operation of tying the artery. The compression may be made either with the fingers, in which case it is kept up for several hours by relays of assistants, by long-continued and extreme flexion of the limb, or by special instruments contrived for the purpose. In two cases of very large subclavian aneurism, which I have treated by the direct pressure upon the tumor of a heavy weight, in the shape of a cannon ball, and where the Hunterian operation was impossible, I have been so fortunate as in one instance to effect the complete obliteration of the artery; and, in the other, to produce coagulation of the contents of the sac, followed by suppuration and sloughing, and ultimately by the perfect cure of the disease.

VARIX AND VARICOCELE.

Many methods have been suggested for the cure of *varicocele*, or enlargement of the spermatic veins. Breschet's method, with the screw-clamp, was almost insupportably painful; while that of Ricord, which is now perhaps the favorite one, consists simply in cutting across the packet of veins with a ligature. I have tried both these plans, as well as that by removing a portion of the scrotum; or, in cases where it has been much elongated, by producing adhesions of its sides by means of sutures.

The following operation, which I have successfully performed in from sixty to seventy cases, and which is, I believe, peculiar, seems to me to be the simplest and most effectual. The vas deferens is first separated from the vascular part of the cord, and is kept out of the way by an assistant. A longitudinal incision, of about two inches in length, is next made in the scrotum, down upon the bundle of veins, which is then seized with the forceps, drawn out, and, by a few touches of the knife, separated from the adhering tissues. Two strong ligatures are now passed, and firmly tied above and below the mass of enlarged veins, so as to include between them as much of the diseased tissue as possible. The strangulated veins, which at once shrink into a very small compass, are now allowed to recede into the wound, which, by the contraction of the scrotum, becomes reduced to a comparatively small size. The patient is confined to his bed, and water-dressings applied during the separation of the slough, which takes

place in from ten to fourteen days. In several cases, where the scrotum has been elongated to double its natural length, and filled with large masses of veins, which would seem almost to defy any mode of treatment, I have operated by this method with perfect success, and have seen the scrotum contract within a few weeks, or, at most, a few months, to its normal size.

Varicose veins of the extremities have been treated by a multitude of operations; among which may be mentioned incision, ligature, caustic, and, latterly, injection with the per-chloride of iron. The method which appears to me to be the least liable to objection is that of passing a pin directly under the vein, and placing a ligature, in the form of a figure-of-eight, over it: this may be retained in place for three or four days, or until a disposition to ulceration is manifested, when the compression may be relaxed by removing the thread, but leaving the needle for some days longer. Mr. Henry Lee, of St. George's Hospital, London, has, I believe, proposed a modification of this method, which would seem to be an improvement. He applies two needles, in the manner just described, at a distance of about two inches apart, dividing the veins between them by subcutaneous incision with a common tenotome.

RADICAL CURE OF HERNIA.

Within the last twenty years, operations for the *radical cure of hernia* have attracted considerable attention; and for a disease so extremely common, and so very inconvenient, and in some cases even

dangerous, it is remarkable that no safe and effectual operation has yet been discovered for its relief. In 1852, Dr. George Hayward, Dr. S. Parkman, and myself, were appointed a Committee of the American Medical Association to prepare a report on this subject. In that paper, I mentioned a number of cases of small herniæ which had been treated with success by the injection of stimulating liquids in the neighborhood of the neck of the sac, in the manner practised by the distinguished Prof. Pancoast of Philadelphia. In some of these cases, as I have since been able to convince myself, the cure was permanent. Since then, many different methods have been proposed, some of which I have tried with success. The one most in favor at the present moment is that by Mr. John Wood, of King's-College Hospital, London, which has been several times performed in this city. It consists, essentially, in the constriction and partial obliteration of the inguinal canal by means of a subcutaneous suture or ligature. Mr. H. Lee has, I believe, professed to obtain the same result by the passage of a small seton through the track of the hernia, confining the patient to his bed, and retaining the sides of the canal in contact by the pressure of a truss. The seton is left in place for a few days only; the precise time being determined by the degree of irritation produced.

A single remark should be made upon *strangulated hernia* with reference to the proper time to operate for its relief. If moderate efforts at taxis fail, even after the full muscular relaxation afforded by the inhalation of ether, no farther time should be lost, but

we should proceed at once to the operation. The danger of the operation is certainly much less to be feared than the violent bruising of the parts by rude attempts at reduction; and I may say, as I have already said of tracheotomy, that I have never seen a case of death following the operation which could not obviously be attributed to some other cause.

PERINEAL SECTION.

On my second visit to Edinburgh, in 1855, after the lapse of about twenty years, I had an opportunity of again seeing Mr. Syme, the distinguished surgeon, still in full fame and vigor. One of the operations, in particular, which, by his invitation, I then witnessed, has been now adopted by surgeons in different parts of the world, and its utility fully established: I mean that of *perineal section* for inveterate stricture of the urethra. It is well known that old and callous strictures in many instances, however often and fully dilated, tend constantly to relapse, and are sometimes followed by very painful and dangerous consequences. In such cases, by cutting down in the perineum, dividing the adventitious tissues freely, and introducing a properly sized instrument of gum elastic, a new canal, not liable to future degeneration, is formed over it. In a number of cases which have come under my own observation, the urethra has been so nearly obliterated, and the small passage through which the urine dribbled has been so tortuous, and the symptoms so urgent, that it has been necessary to proceed at once to the operation, unguided by any instrument in the urethra.

This procedure is, under such circumstances, exceedingly laborious, especially where the stricture is complicated by numerous fistulæ and old callosities in different parts of the perineum: still I have never been defeated in the attempt to find the urethra, and all the cases have resulted in the relief of the patient. This operation, which is now very frequently performed for the cure of partial obliteration of the urethra, occurring both from accident and disease, may be made in many cases also—such as those mentioned above—to take the place of puncture of the bladder through the rectum.

I have also seen numerous cases operated on by *internal division* by Civiale; but the results were certainly not so striking as in the cases treated by Mr. Syme.

INJURIES OF NERVES.

Since the beginning of the present war, I have had occasion to treat several soldiers for *severe neuralgia following gunshot injuries of large nerves.* In these cases, the pain was so intense as to deprive the patients of sleep; and had continued in one instance for several months, in spite of various local applications of greater or less severity. The question was raised as to the propriety of dividing one or more of the large nerves of the arm; but, in the absence of recorded cases undertaken for this object, it was thought best first to try milder measures. In one case, where the median nerve was evidently entangled in a mass of dense cicatricial tissue, it was carefully dissected out, with the effect, for a time, of

completely relieving the pain; but, on the re-establishment of cicatrization, this symptom returned, although in a much less degree than before. The other cases—two in number, which, with the first, I have already published—were also dependent, probably, upon changes which had taken place in the tissues immediately surrounding, in one case, the median and radial, and, in the other, the sciatic nerve. The most rational hope of a cure evidently lay in waiting for the completion of the natural processes of repair, provided only that the pain could be held sufficiently in check to admit of the requisite delay: this problem was very happily solved by the use of daily hypodermic injections of morphia; which, in one case, were continued for nearly six months, without seeming to impair the health or appetite. The dose of morphia administered in this way did not exceed half a grain a day, and did not require to be increased, as is generally the case when given by way of the stomach. No attempt was made to inject in the immediate vicinity of the nerve; and in numerous instances in which the operation was performed on the opposite limb, or even in distant parts of the body, the experiment was equally successful.

OVARIOTOMY.

The extirpation of large *ovarian tumors* has been occasionally practised for a long time. Within a few years, the operation has been revived in England and in this country with remarkable success; many patients, otherwise doomed to a lingering death, hav-

ing been completely cured by it. The great obstacle to the more free performance of ovariotomy is the hesitation which the surgeon feels to advise, or even to permit a patient, in the enjoyment of moderate health, to undergo, an operation which may almost immediately prove fatal. In itself, ovariotomy is not more dangerous than many of the recognized cavital operations; the difference being, however, that these last are done in a pressing emergency, while ovariotomy is not. The proper course of practice would therefore seem to be, to make a fair statement to the patient and friends of what they have a right to expect from the operation, leaving to them to decide for themselves. I have once been completely successful in the treatment of an enormous unilocular cyst of the ovary, in which respiration was impeded, the limbs edematous, and the patient rapidly failing, by evacuating the cyst, and leaving the canula in position; making occasional use afterwards of iodine injections.

The only point to be especially noticed in the manner of performing ovariotomy is the method of securing the bleeding vessels of the pedicle. The plan now most in favor is by drawing the stump out of the wound, and compressing it in a clamp made for the purpose. This proceeding, however, is sometimes attended with severe pain, especially if there is much tension of the parts. Prof. Simpson, of Edinburgh, has lately recommended "acupressure" as a substitute for the clamp, and claims for it substantial advantages.

The treatment of large *fibrous tumors of the uterus*

by enucleation, is another of the many valuable surgical improvements for which we are mainly indebted to the fertile invention of the distinguished Professor of Obstetrics in the University of Edinburgh.

I have recently operated with success upon a remarkable case of *hypertrophy of the os uteri, with excessive elongation of the cervix*;—a disease which has been generally confounded with prolapse of the organ, but which has been very recently investigated by M. Huguier, who has published an elaborate monograph upon the subject. In this case, as in several described by Huguier, the external tumor was larger than a goose egg, and consisted not only of the enlarged os, but also of a considerable portion of the bladder in front, and a large cul-de-sac of the peritoneum behind. The treatment consisted in the careful dissection of the os and cervix from the adjacent organs, dividing the cervix at as high a point as could be conveniently reached. The other organs being thus relieved from the dragging effect of the tumor, immediately returned to their normal positions; the cure was complete.

ORTHOPEDIC SURGERY.

The division of tendons for the cure of deformities, as instituted by Stromeyer, has come into general use within the past thirty years. Almost all the tendons, and, I may say, muscles of the body, have been divided, with this object in view. The beautiful operation of Dieffenbach for strabismus has lately been greatly improved by dividing the tendon as near as possible to the cornea, and stitching up the

wound afterwards. The division of tendons, assisted by ingenious mechanical contrivances,—which has been nowhere practised with greater success than in our own city,—has been made to yield results seemingly almost beyond belief. These cases, however, require great skill in operating, much ingenuity in adapting apparatus, and great patience in using it; and no surgeon, not possessed of this latter virtue, can hope to attain any great success.

It has been contended very lately in England, that most of the cases for which tenotomy has usually been performed may be equally well treated by mechanical appliances alone. The truth probably lies between the two extremes of practice.

REMOVAL OF TONSILS.

For a minor operation, perhaps none affords so much relief, and has so much effect on the constitution, as the removal of enlarged tonsils. The patient, with a half-strangled respiration, the chest deformed, pale, trembling, and subject to exhausting perspirations,—I allude to extreme cases,—by the removal of these tumors, regains a free passage for the air to the lungs; the good effects of which are at once shown by increased vitality, improved nutrition, and restoration of color. The tonsils were formerly either excised by the knife, or removed by the ligature; both operations being of such importance as to be undertaken with considerable dread. Excision was often followed by severe hemorrhage; and the removal by the slow action of the ligature, with the attendant swelling of the throat and the putrid

exhalations, is almost too bad to be mentioned. By the simple guillotine instrument,—introduced by Dr. J. C. Warren,—the operation may be performed without danger, and hardly compels the patient to abstain from a single meal. I have performed this operation from five hundred to a thousand times, and have never lost a single patient from it, nor had a single case of dangerous hemorrhage. In two instances where I have seen it done by the modification of Fahnestock's instrument,—which requires the tonsil to be fixed with a fork, and the section made by drawing the knife instead of pushing it,—I have known troublesome bleeding to occur. The reason is, that, in this manœuvre, the knife requires to be very sharp, to prevent the tonsil from being torn up, so to speak, by its roots: whereas, by the simpler guillotine, the tonsil is, in the first place, not drawn out from the side of the throat; and, secondly, is partially jammed rather than cut off,—thus affording an additional safeguard against hemorrhage.

In the "Philadelphia Medical Examiner," April 6, 1839, I published an account of certain deformities of the chest, which might be attributed to enlarged tonsils, obstructing the passage of air, and preventing healthy respiration. This malformation has been previously described by Dupuytren, but was not attributed by him to its proper cause. The form of the chest at once begins to improve on the removal of the obstruction to the respiration.

ARTIFICIAL ANUS.

A more distressing and loathsome malady can hardly be conceived than the constant discharge of fæcal matter through a fistulous opening on the outside of the abdomen. It is to Dupuytren, ever fertile in expedients, that we owe the very ingenious method of treating this affection by destroying the projecting spur of intestine before attempting the closure of the external orifice. I have been consulted in a number of cases of artificial anus, resulting both from accident and from disease, and in two cases which I have treated I have obtained most satisfactory results. In one of these cases, the external opening was entirely closed and the cure perfect; in the other, also, the continuity of the intestine was restored, but a fistulous aperture remained, through which a small quantity of serous fluid only was discharged.

The instrument which I have employed for the destruction of the spur of intestine is much smaller and lighter than that of Dupuytren; it is therefore much more easily retained in position, and avoids the heavy dragging action upon the parts which often gives rise to great suffering.

ECRASEMENT LINEAIRE.

Within a few years, we have heard of the introduction in France of the *écraseur;* by which, instead of cutting the tissues with the keen edge of the bistoury, it is proposed to divide them by a slow process of crushing, and thus to remove tumors, amputate

limbs, and, in fact, perform almost all operations hitherto done with the knife. The supposed advantages of this method are, the prevention of hemorrhage, and the diminution of the risk of purulent absorption, by closing up the great venous trunks. For the former of these reasons, this instrument will be occasionally used where great danger from bleeding is anticipated, as in the case of vascular tumors, internal hemorrhoids, and in the removal of large portions of the tongue, &c. In other cases, however,—such as the excision of breasts, opening of abscesses, *lithotomy*, and many other operations usually done with the knife,—its use will hardly extend beyond the wards of its inventor.

It is impossible, within the limits of this address, even to enumerate the important improvements which have been made in the science and art of surgery during the last quarter of a century. I have therefore confined myself to the discussion of a few prominent topics; selecting those in which, as it has appeared to me, the changes of practice have been most marked. Amid the varied distractions of active professional life, many valuable discoveries are for a time neglected; and we are all apt to look with especial regard upon such subjects as have been more particularly connected with our own pursuits. This brief sketch, therefore, of recent surgical progress, must, after all, be considered as but an imperfect review of a few chapters of individual experience, rather than a true record of the real advancement of our art.

I cannot omit a brief allusion to the vast field for surgical improvement opened by the gigantic war in which we are now engaged. From a very early period, great efforts have been made by the Government to secure accurate reports of the work done by its medical officers, and to collect upon a large scale specimens illustrative of the wounds inflicted by the deadly missiles of modern warfare. The collection and publication of these statistics cannot fail to throw light upon many important points both of practical surgery and of military hygiene; but, for the full benefit to be derived from such studies, we must wait for the leisure of returning peace. Meanwhile the duties of the camp and hospital are impressing, upon the minds of a thousand laborers, lessons of practical experience which cannot fail to exert a marked influence upon the future literature of our profession. All praise is due to the members of our medical corps, summoned hastily from private life to scenes of new and untried labor; and who, by the fidelity and enthusiasm which they have shown in the performance of duty, have more than atoned for early lack of military training.

In this connection, a passing tribute is due to those members of our Society who have devoted their lives and energies to the service of their country in her hour of trial. Through the wise foresight of his Excellency the Governor of this Commonwealth, at the very commencement of the war, a Board of Medical Examiners was created, in order that the qualifications of every candidate for the position of surgeon or assistant surgeon to our regiments might

be thoroughly and impartially tested. Aided by their judgment, and seconded by the untiring energy and patriotism of our deservedly popular Surgeon-General,* he has, by a wise exercise of the appointing power, made the name of Massachusetts surgeons honorable throughout the length and breadth of the land; and has added another to the already numerous proofs as well of his enlightened appreciation of the benefits of thorough scientific training, as of his conscientious and consistent devotion to the cause of humanity.

To one, especially, of our number† does the nation owe a large debt of gratitude for the perseverance with which, through evil report and good report, amid endless discouragements and deep personal affliction, he has steadfastly and unswervingly labored for the humane object of mitigating some of the dreadful horrors of the battle-field by the organization of an improved system for ministering promptly to the necessities of the wounded. It is to the noble earnestness and zeal of our honored associate, more perhaps than to any other agency, that the public interest has at length become aroused, and the establishment of a uniform and efficient ambulance system, as it were, forced upon the action of Congress.

Nor should we overlook the valuable yet unobtrusive services rendered by others of our number as agents of those great national charities, the United-States and Western Sanitary Commissions. I will not parade the names of the gentlemen of this So-

---

* William J. Dale, M.D. † Henry I. Bowditch, M.D.

ciety who have promptly responded to calls made by these organizations for professional services at a time when the machinery of the medical department of the army was as yet inadequate to its task; repairing at once to the scene of most urgent need, and cheerfully performing whatever work came first to hand. The good they accomplished is their sufficient reward.

In connection with the Sanitary Commission, it is our grateful task to record the lasting gratitude of the nation to its women for their untiring efforts in behalf of suffering humanity. The value of their example is above all estimate: but of the extent of their labors some approximation may be gathered from a recently published statement of the United-States Sanitary Commission,—that the contributions of hospital-stores to this charity alone have amounted to no less than seven millions of dollars; and this in addition to large donations of money, and to immense contributions distributed through other public and private agencies. This was before the recent unexampled contributions from the great fairs held in all our large cities, which have already swelled the amount to several millions more than that stated.

One of the sad duties assigned to the orator of this occasion is to recall the labors and record the virtues of those of our number who have died during the past year.

Since our last meeting, thirty-eight members of this Society, some of them among the most distinguished in their generation, have finished their work on earth, and now rest from their labors.

One,* an ex-President and most distinguished officer of this Society, of which he had been for more than half a century a fellow, ever laboring earnestly and efficiently in furtherance of its interests and in support of its dignity, in turn an honored and learned instructor and fellow of our University, having filled with distinction many high public trusts, was suddenly taken in the full activity of a ripe but vigorous age.

Another,† whose sudden death we also mourn, long a successful and beloved practitioner in a neighboring city, and having but yesterday, as it were, come among us, had already won the esteem and love of every one, by the display, in a rare degree, of those highest moral and intellectual qualities which characterize the wise and skilful physician and the true Christian patriot.

A third,‡ an honorary member of this Society, a native of Boston, and a graduate of Harvard, for many years a resident of London, where he had gained high distinction as well for his professional skill as for his eminent scientific attainments, had endeared himself to thousands of his countrymen by his kindly manners and considerate attentions. Although resident abroad for nearly fifty years, how many among us feel in his death the loss of a personal friend as well as of a most distinguished member of our profession!

---

* George Hayward, M.D., late Professor of Surgery and Clinical Surgery in Harvard University, President of the Massachusetts Medical Society, &c., died Oct. 5, 1863.

† John Call Dalton, M.D., died Jan. 8, 1864.

‡ Francis Boott, M.D., Fellow of the Royal College of Physicians, Vice-President of the Linnæan Society, &c., died Dec. 25, 1863.

And, lastly, within the past month, yet another of our most honored associates,* a late President of this Society, and for more than a quarter of a century Professor of the Theory and Practice of Medicine in our school, has been suddenly called to another and higher sphere of labor. Eminent as a teacher for the soundness of his reasoning and the judicious moderation of his views, his precepts have left a deep and enduring impression on the minds of a whole generation of followers. Distinguished in his professional relations for lofty integrity of purpose, eminent fairness in discussion, and modest confidence in the expression of his carefully matured opinions, he gained the affection and respect of his younger brethren by his uniform kindness of manner, and considerate regard for their interests.

In recalling the memories of our departed friends, we are insensibly led to consider a few of the causes which helped to raise them to the eminent social and professional stations they so worthily adorned; and, for an enumeration of the qualities most essential to success in the practice of the healing art, I know of no writings, which, for quaint appropriateness, compare with the ancient Hindu "Shastras," or sacred books of medicine.† The quaintness of the few extracts, with which I conclude, will be readily excused in view of their remarkable good sense and high moral tone.

---

* John Ware, M.D., late Hersey Professor of the Theory and Practice of Medicine, President of the Massachusetts Medical Society, &c., died April 29, 1864.

† See "Commentary on the Hindu System of Medicine." By T. A. Wise, M.D. Calcutta: 1845.

"The scholar, on beginning his lessons, must thenceforth discard lust, anger, covetousness, ignorance, laziness, vanity, pride, envy, revenge, cruelty, lying, and evil actions. He must always be engaged in the search after truth, and in the performance of good actions; he must be clean in his person, must harbor no bad thoughts, must be moderate in the indulgence of the appetites, and must be contented with a small recompense; he must avoid bad company, and avoid entering a house as a medical man without an invitation."

"He must study the 'Shastras' with care; but if a physician does not know, or does not follow, the precepts of the 'Shastras,' he will be like a thief, and will commit as great a sin as beating a Brahman."

"The physician should possess a healthy body; he should keep his nails and beard short, his body pure, his clothes clean, and wear shoes and a small turban. He should carry an umbrella and stick in his hand." "He should study to remove curable diseases, but should avoid treating healthy persons."

"The physician must have practised his profession as well as have studied the 'Shastras.'" "Without such a knowledge of books, he will be confused, will be a great sinner, and should be capitally punished by the rajah. On the other hand, a want of practical knowledge will impede his advancement, and his senses will be bewildered when called upon to treat acute diseases." "A physician, if he is to acquire celebrity, must still daily endeavor to improve his mind by an attentive perusal of scientific books. If such a physician does not gain money, it is his own fault."

"A bad physician may cure one patient, by which he endeavors to establish his fame, without considering the thousands he has killed. Such a fellow is as a deadly serpent, and should be avoided."

The practical shrewdness displayed in the following precepts sufficiently commends them:—

"The physician should avoid visiting a sick person during the night." "If the physician visits the patient by night, the person will die of the disease."

"It is necessary to recollect that a good Brahman and a rajah will be cured of a disease with difficulty, as they will not always take the proper remedies, and the physician is afraid to urge his instructions strongly."

"A person rejecting a physician will be punished in hell; whereas, when a physician is employed, the patient will go to heaven, even should he not be able to see the sacred Ganges in his dying moments."

RECOMPENSE OF THE PHYSICIAN.

"When a physician has cured a disease, he is entitled to the usual gift for the performance of a good action. These will vary with the rank and condition of the patient. Money will be the recompense bestowed by the rich; friendship, reputation, increase of virtue, prayers, and gratitude, will be that of the poor. When a Brahman, a relative, an humble and good friend, or one without relations, consults a physician, he must not accept of any pecuniary recompense: his reward, in such cases, will be an increase of knowledge, and the gratification of his desires in having an opportunity of performing a good ac-

tion. His cures will insure the admiration and the esteem of all men; he will be honored and respected as a master; and, after death, he will go to heaven. Should the patient prove ungrateful after being cured, his holiness and good fortune will pass to the physician. But the physician must avoid administering remedies to hunters or great sinners: such people do not deserve his assistance."

Names of Fellows of the Massachusetts Medical Society

DECEASED SINCE THE LAST ANNUAL MEETING, JUNE 17, 1863.

* *Honorary Members.*

Admitted.	Name.	Residence.	Age.
1844	Alanson Abbe	Boston	69
1839	Jason H. Archer	Wrentham	69
1830	*Francis Boott	London, Eng.	72
1849	Benj. F. Burgess	Wareham	40
1841	Erastus H. Clapp	Wrentham	49
1845	Moses Clark	East Cambridge	46
1829	Aaron Cornish	New Bedford	74
1851	Arial I. Cummings	Roxbury	40
1831	Benjamin Cutter	Woburn	61
1823	John C. Dalton	Boston	68
1862	Charles Edson Davis	Ashburnham	41
1821	Timothy Fiske	Holliston	85
1829	Joshua B Flint	Louisville, Ky.	62
1852	Lemuel Fuller	North Weymouth	51
1862	Charles H. Haskell	South Abington	31
1816	George Hayward	Boston	73
1837	*S. P. Hildreth	Marietta, O.	80
1840	C. G. Holbrook	South Abington	57
1822	Vincent Holcomb	W. Granville	68
1839	Selden Jennings	Richmond	50
1855	Samuel H. Keep	Boston	30
1844	S. D. King	Lunenburg	76
1847	M. A. Moore	Waltham	39
1837	Charles McAllister	Stockbridge	70
1826	John Nelson	Woburn	74
1839	Otis Perham	Lowell	50
1856	D. C. Perkins	South Danvers	39
1861	H. S. Plympton	Cambridge	25
1863	Eugene P Robbins	Boston	—
1860	M. T. Robinson	Jamaica Plain	51
1815	Dean Robinson	West Newbury	75
1854	David Roberts	Boston	36
1836	John Stevens	Boston	74
1847	James W Stone	Boston	40
1846	John A. Tarbell	Boston	—
1838	Thomas K. Thomas	Roxbury	—
1820	John Ware	Boston	68
1853	Ira Warren	Boston	59
1826	Charles Wild	Brookline	69
1855	R. H. Wheatland	Salem	33
1826	James M. Whittemore	Brighton	68
1851	Isaac P. Willis	Royalston	56

Honorary Members 2
Members 40

Total 42

OBITUARIES.

DR. GEORGE HAYWARD.

WHILE the Councillors of the Massachusetts Medical Society were assembled at their stated meeting, October 5, 1863, a messenger arrived with the sad intelligence that Dr. GEORGE HAYWARD had suddenly departed this life. His colleagues have seldom witnessed a more impressive scene than that which followed this announcement.

Long, earnestly, and effectively had Dr. Hayward served in the profession of his choice. Born in Boston, March 9, 1791, a graduate of Harvard in 1809, he took his medical degree in Philadelphia in 1812, and completed a thorough medical education in the hospitals of Europe; enjoying the instructions and friendship of Abernethy and Sir Astley Cooper in England, and other eminent men on the Continent. On his return, he became one of the founders of the Boston Linnæan Society. He was also one of the founders, and the first Vice-President, of the Boston Society of Natural History. He was a President of the Boston Athenæum, and long a member of the American Academy of Arts and Sciences. He was also a President of the Massachusetts Medical Society, and an active member of the Boston Society for Medical Improvement. He translated Bichat's and Beclard's "General Anatomy" (4 vols. 8vo), and published many important medical papers and reports. Thoroughly versed in the principles and theory of surgery, he was a remarkably practical and popular teacher in the professor's chair and at the hospital cliniques; while his kindness and consideration for the poorest patient in the wards afforded a model to the numerous students who followed him.

A careful and judicious operator, he originated new and successful methods in some difficult and almost hopeless lesions; and was early to assist in developing the anæsthetic powers of ether. In private practice he was skilful, kind, and sympathizing; prompt at detecting disease, and fertile in resources to oppose it. At the time of his death, he was President of the Massachusetts Medical Benevolent Society, President of the State Military Medical Board, and a Fellow of the Corporation of Harvard University,—an honor rarely granted to the profession.

In all these, and many other similarly prominent positions, he unselfishly maintained the dignity of his calling. Intolerant of professional sham and pretension, even the suspicion thereof in others led to impetuous denunciation. A man of honor, he was quick and unsparing whenever he thought it infringed upon. Disgusted with the too frequent hollowness of posthumous eulogy, he scrupulously destroyed every thing that might lead to it in his own case. The future biographer may therefore lament the loss of valuable documents; but for the many distinguished services which his high social position and ability gave him the power, and his ardent temperament impelled him, to render, the profession and the public will place the name of Dr. Hayward, widely known at home and abroad, high upon the roll of eminent medical men.

B. E. C.

DR. JOHN CALL DALTON.

Dr. JOHN C. DALTON was born in Boston in 1795. He graduated at Harvard College in 1814, took his medical degree in Boston in 1818, and joined the Massachusetts Medical Society in 1823.

He commenced practice in 1818, in the town of Chelmsford; succeeding to the late Dr. Rufus Wyman, who had been called to the charge of the M'Lean Asylum for the Insane. Entering at once upon a large and responsible practice, he gained the early and lasting confidence of the community.

A few years later, when a part of Chelmsford was set apart for a new town of larger destinies of growth and importance, as the city of Lowell, he removed to this new and wider field; carrying with him a reputation which at once placed him in the highest rank among his professional brethren. His subsequent history is chiefly identified with that of Lowell, where he resided for twenty-eight years, devoting his life and energies to the laborious duties of an honorable and successful practice.

Coming to Boston in the ripeness of age, in the fulness of professional experience, and with the highest reputation and character, he was received with a cordial welcome by his medical brethren of that city. Nevertheless, being in easy circumstances, with his advancing years, he did not care to enter anew into active employment, nor assume the labors and responsibilities of general practice; yet with unimpaired health, and great mental vigor yet remaining, he readily lent his ripened wisdom and his unfaltering powers, his warm and generous heart and earnest sympathies, to the service of his fellow-men. He readily

engaged in works of love,—in the aid of the poor, in the care of public charities, in the cultivation and advancement of the means of elevating and ameliorating humanity.

He was a devoted and efficient trustee of the School for Idiots, an active member of the Sanitary Commission, and an earnest laborer for its success: he was also one of the physicians elect of the new City Hospital, and a devoted member and counsellor of the Massachusetts Medical Society. Although no longer engaged in the active practice of his profession, he did not rest, nor were his great and highly cultivated powers left unemployed; all his talents and strength were given to the public good; and his kindness of heart, his tender sympathies, and his genial spirit, made him an acceptable and desirable associate both among his professional brethren and in society at large.

He died on the ninth day of January, 1864, from the result of injuries sustained in a fall a few days before. During his short sickness, he retained his usual calmness and philosophy, watching the progress of his malady with a scientific interest, and marking the slow but inevitable approach of death. Through this progress of decay, he trusted in his God, as in the vigor of his years he ever had; and met death as a Christian, prepared to give an account of a faithful stewardship on earth, and to enter on a larger responsibility in the world of spirits.

E. J.

FRANCIS BOOTT, M.D. EDIN., F.R.C.P.L., V.P.L.S., &c.

(*From the "Medical Times and Gazette."*)

Though taking no part latterly in professional practice, Dr. Boott's death is one which will be severely felt, not only amongst a large society of medical men, but in the ranks of science generally. Few men were more accomplished and well informed; fewer still more beloved and esteemed, whether for the power and will to serve or to please, or for the sterling qualities of his mind.

Dr. Boott was born in the year 1792, in Boston, Mass., of British parents; his father being an Englishman, and his mother a Scotch lady. His parents being in good circumstances, young Boott, after completing his classical education at Harvard College, was sent over at seventeen to England; that being then, as now, the grand tour to many young Americans. Here his studious habits and literary talents soon led him to form intimacies only with persons of like pursuits; and his habits were thus early copied from models so judiciously chosen, that he ever after regarded these counsellors of his youth as types of refinement and moral worth. For several years, he voyaged back-

wards and forwards between England and America, making life-long friendships in both countries; but especially in this, where Sir Joseph Banks's house offered great attractions to young men, whether of literary or scientific tastes; and where Sir James Smith, President of the Linnæan Society, and Mr. (now Sir William) Hooker, keenly encouraged his botanical studies.

In about 1820, when upwards of twenty-eight, already married, he determined to study medicine; and placed himself under the tutelage of Dr. John Armstrong, in London. Thence he removed to Edinburgh; where he finished his education, and took his doctor's degree in 1824.

On his return to London, he commenced practice, and accepted the lectureship on botany in the Webb-street School of Medicine. This chair, however, though admirably conducted, he did not long hold. He also published his lectures on "Materia Medica"; and more lately, at the dying request of his friend Dr. Armstrong, he edited his "Life," and published it with a treatise of his own on "Marsh Fevers," illustrative of Dr. Armstrong's views. This latter part of the work is one of considerable eruditive merit. It treats largely of the fevers of the United States and Europe, and of the plague, under the several aspects of that disease, which he traced from Egypt and Syria, through Italy, France, and Holland, to England; showing that its type was always that of a periodic fever, but that its symptoms varied according to the climate of the several countries mentioned.

For seven years, Dr. Boott practised very successfully in London; being especially noted for his treatment of fevers, in which he followed the practice of Dr. Armstrong, in giving abundance of air, &c., to the patient,—a course which, at that time, was vehemently objected to by the profession at large. In other respects, too, he was a judicious innovator; being one of the first to discard the black coat, white neck-cloth, knee-breeches, and black silk stockings, for the ordinary costume of the day. This was then a blue coat with brass buttons, and yellow waistcoat, which he continued to wear to the last; and thus, by outliving the fashion, as he had forestalled it, he came to be as well known in 1860 as he had been in 1830.

Dr. Boott early retired from practice; and, having inherited a competency, he devoted himself for the last thirty-five years to the cultivation of his literary and classical tastes, to the study of botany, and to the duties of a Member of the Council of University College, and Secretary and Treasurer of the Linnæan Society. In the latter capacities, especially, he was most highly respected; conducting the business of the College and of the Linnæan Society with singular tact, skill, and judgment; neither giving nor taking offence; and winning the esteem and cordial support of his brethren in office during a very long period

of active and gratuitous services. Of the Linnæan, especially, he seems to have been a distinguished member, no less for the disinterested zeal with which as a personal friend of its founder, Sir James Smith, he devoted himself to its financial welfare, or as a cordial friend of science and scientific men interested like himself in its meetings and publications. His portrait hangs on the Society's walls; and his blue coat and bright buttons are with many inseparably connected with its meetings.

Dr. Boott's botanical labors were entirely confined to the study of the great genus *Carex*; of which upwards of six hundred species are known, and in which he took the keenest interest, spending many hours daily in analyzing them, and laying out large sums of money on their illustrations. Much of his labors has seen the light in a large folio work, in two volumes, containing upwards of four hundred plates and descriptions of *Carex*; all produced at his own expense, and distributed with a lavish hand amongst English, European, and American botanists. This is, indeed, a magnificent work, and will immortalize its author. To it, however, we regret to add, the curtailment of his life is, in some measure, undoubtedly due; the close application necessary for its successful elaboration having materially tended to enfeeble his never very vigorous frame. The immediate cause of his death was disease of the right lung, induced by pneumonia, of which he had two severe attacks,—one in 1839, which permanently injured his health, and prevented his undertaking any very laborious exertion thereafter; the other in June of the past year, from which he never rallied, and of which he died on Christmas Day, at the age of seventy-one years.

In person, Dr. Boott was very tall and thin. His manners were singularly pleasing, and his expression refined in the highest degree. His countenance was indeed very much a reflex of his mind, which was singularly polished, cultivated and sensitive. Nothing delighted him so much as companionship with the young, to whom his kindly manners, generous sympathies, and considerate conduct, much endeared him. His love of art was no less strong than that of literature and science. His house was full of excellent and always pleasing pictures, and his large library was as select as possible. In connection with literature, a most characteristic act of his was to erect a tablet to the memory of Henry Kirke White, of whom and whose family he knew nothing personally, but whose life and poems he ardently admired, and to whose memory no tribute of the kind had been paid.

Such is a meagre record of the life of a man whose death is felt by a large circle as a personal loss; and who was, in every sense, an ornament to the profession of medicine.

DR. JOHN WARE.

Dr. JOHN WARE died in Boston on the 29th of April, 1864, at the age of sixty-eight. He was a physician of just eminence, and had been President of the Massachusetts Medical Society, Professor of the Theory and Practice of Medicine in Harvard University, and a physician of the Massachusetts General Hospital. He was the son of Henry Ware D.D., Professor of Theology at Cambridge; and was graduated in Harvard University with the class of 1813, of which he was a distinguished member.

The first part of his professional career was obscure and laborious, and chiefly confined to the northerly part of the city. His expectations of success were at one time so doubtful, that he applied himself to the study of dentistry, as a subsidiary resource in case of failure to succeed in other walks of his profession. It was not long, however, before his application, good sense, thorough education, and undeviating sincerity and honesty of purpose, obtained for him the confidence of many friends and established him in a desirable practice. His professional and social position was high, and generally acknowledged; and, for a quarter of a century, he was one of the most active members of the profession in Boston. For the last twenty years of his life, his health had become impaired from the arduous duties to which he gave himself, both as a practitioner, a writer, and a teacher in the Medical School. He purchased a farm in the country, to which he retired for rest and relaxation in the summer months. He continued, however, to attend to business; and his advice as a consulting physician was much sought and respected.

Dr. Ware was an early adherent to the medical reform which had begun in this city some thirty years ago, and by which the power of active treatment to arrest the progress of certain acute and specific diseases was discredited, and its use, at length, generally relinquished. He was one of those who perceived, that among the things most frequently injurious to patients, under the heroic practice then and previously in vogue, was the *nimia cura medici*. A favorite term used by him in enumerating the various causes of mortality was that of "hyperpractice." One of his oldest and most distinguished medical friends, in speaking of his degree of faith in the infallibility of medicines in this respect, said, "Dr. Ware is an excellent doubter."

One source of his popularity with his patients was a delicate and intuitive regard for their convenience in small things as well as their welfare in greater. He had an instinctive aversion to over-drugging. His prescriptions were simple; seldom containing more than one, two, or three articles. His habit was to order small quantities at a time,

deprecating the practice of those who fill the chambers of the sick with residuary portions of expensive, unnecessary, and perhaps deleterious compounds. His belief in the importance of a just diagnosis was unlimited; and he properly attributed the errors common in empirical and routine practice to an incompetent understanding of the pathological character of the case.

Dr. Ware was an important contributor to different periodical works, and was at one time an editor of the "New-England Journal of Medicine and Surgery." For about twenty years, he gave lectures in Harvard University as Professor of the Theory and Practice of Medicine; in which office he acquitted himself with reputation, and much to the instruction as well as acceptance of his hearers. He labored for truth and knowledge, avoiding assumptions which applied only to his own reputation.

He died of apoplexy, after a few hours of insensibility; this disease being one which he inherited from his father, and of which he had had unmistakable premonitions.

J. B.

ON THE USE OF STRAW

AS A SUBSTITUTE FOR

SPLINTS OR THE FRACTURE-BOX,

IN THE TREATMENT OF FRACTURES OF THE LEG.

BY JOHN GREEN,

FELLOW OF THE MASSACHUSETTS MEDICAL SOCIETY.

THE following method of treating fractures of the leg has been submitted to very extensive trial during the past thirty years, and is now brought forward in the conviction that it offers important advantages over most of the ordinary plans of treatment.

Bundles of straw, reeds, small twigs, etc., have long been employed in surgery, under the name of junks, and have rendered good service both as temporary supports to fractured limbs, and as adjuncts to other and more complicated forms of apparatus. They have not, however, been generally adopted as permanent appliances, although in some respects decidedly preferable to wooden splints.

The principal advantages claimed for straw over other materials commonly used for splints, are its lightness, combined with abundant stiffness, its ready adaptability to the form of the limb, and lastly, but by no means least, its cheapness, which, in cases of compound fracture, admits of the renewal of the apparatus as often as it becomes soiled by the discharges. The present method of using straw is even simpler than that by junks, and is especially adapted to the treatment of most of the varieties of fractures, whether simple or compound, in the leg.

The manner of applying the straw apparatus is very simple: the larger ends of the straw, which should be straight and whole, are cut to the proper length, extending usually from the knee, or a little higher, to a point a few inches below the foot; it is then arranged in a parallel direction in a common pillow-case, the quantity required being about as much as would make a bundle of from three to four inches in diameter. In this way we obtain a thin pillow of straw, which is now to be drawn under the injured leg and tied snugly around it with a sufficient number of tapes or cords, having first reduced the fracture and adjusted the limb in a correct position. Room is made for the heel by separating the straw a little immediately beneath it, and the whole arrangement is completed by supporting the limb on the sides by a couple of sand bags or billets of wood, to prevent rolling. If preferred, the limb in its straw case may be suspended by cords from a cradle or from the ceiling. No bandages of any kind need be used, and no splints but the straw, provided only that it is even moderately whole and stiff; if, however, the straw is of bad quality, or if, as often happens in the army, hay only can be procured, it may be advantageous to increase the rigidity of the apparatus by the addition of a few stiff twigs, or by placing two or three thin laths upon the outside of it.

The security which this simple apparatus affords against displacement is very much greater than might be supposed by one not familiar with its use; in a large proportion of cases the patient is able to move the leg readily, with a little aid from his hands, from one part of the bed to another. The limb is quickly and easily exposed and as easily readjusted, and any wound may be dressed with the greatest facility. There is no danger of constriction by bandages becoming tight in consequence of swelling, and the liability to accidental displacement is so slight that the patient or attendants may be safely allowed to loosen one or more of the tapes should it become necessary to relieve pain.

The accompanying wood-cut, copied from a photograph, shows the apparatus in use. The pillow-case is represented as cut off below the foot in order to show the straw.

I owe the knowledge of this method to Dr. John Green, of Worcester, Mass., who first contrived it about the year 1835, as a temporary appliance in a case of severe compound and comminuted fracture of the leg resulting from a railroad accident. Struck by the advantages of the apparatus in ease of application and removal, and especially in the great comfort which it afforded to the patient, he was led to continue its use throughout the whole progress of the cure; and for a period of over fifteen years of extensive surgical practice he continued to employ the same method in the treatment of all cases of fracture of the leg. I have treated several cases of bad gun-shot fracture of both bones of the leg according to this plan, and believe that for such extreme cases, as well as for simple fractures, it is, on the whole, the best method of which I have any knowledge.

BOSTON, MAY 25, 1864.

ARTICLE V.

DISEASE; — A PART OF THE PLAN OF CREATION.

BY BENJAMIN E. COTTING, M.D.

OF ROXBURY.

READ AT THE ANNUAL MEETING, MAY 31, 1866.*

MR. PRESIDENT, AND FELLOWS OF THE MASSACHUSETTS MEDICAL SOCIETY:

THE profession we follow is capable alike of the divinest endeavor and the meanest purpose. To save it from degradation, and to elevate it to its true position as one of the noblest of human vocations, its faithful votaries have labored with untiring energy in past times and in our own, down to the present hour.

To understand disease, and to "cure" it, are the great objects and the laudable aspirations of the Medical Profession. The former is difficult; the latter often impossible. Notwithstanding the advanced state of medical science, numbers are at all times prostrate by sickness, and most of the race die prematurely. So uncertain are the effects of dis-

* At an Adjourned Meeting of the Mass. Medical Society, held Oct. 3, 1860, it was
Resolved, "That the Massachusetts Medical Society hereby declares that it does not consider itself as having endorsed or censured the opinions in former published Annual Discourses, nor will it hold itself responsible for any opinions or sentiments advanced in any future similar discourses."
Resolved, "That the Committee on Publication be directed to print a statement to that effect at the commencement of each Annual Discourse which may hereafter be published."

eases, and so disastrous often their termination, that even the simplest attack may become a source of personal anxiety and alarm. Such too are the sympathies of our nature, and so constantly are they thus called into action, that experienced attendants upon the sick frequently grasp blindly and fortuitously at a multitude of nominal or heterogeneous appliances which have obtained the name of remedies, in the hope that some one of the number may perchance relieve or rescue the sufferer. In this way physicians themselves, even the more eminent, are imperceptibly and almost inevitably brought to the practical belief, that in the officious administration of drugs sanctioned by custom or prevailing prejudice — the superintending "a course of treatment," as it is called — lies the chief end and aim of their calling. So thoroughly at last does this idea permeate the very life and thought of daily routine of our profession, that the mere suggestion of a more comprehensive and a more scientific view, or a more rational motive, if suspected of any accompanying distrust in popular or fashionable professional measures, is liable to be frowned upon as heresy. And thus it happens, that in every generation the struggle must be renewed to re-establish principles, and to arrest the mechanical, downward or trade-like tendency of our art; and good men and true are called upon, and must be willing to go to the front and bear the brunt of the battle.

Grand forward movements in behalf of medical truth have been made in various directions in our own time, and with varied success; but it is well known

to the members of this Society, that the great victory of the present century was achieved in this place just thirty years ago. Carefully and irresistibly the first advances were then made, and the first positions gained, until at length the whole argument was carried home and the stronghold impregnably secured. From henceforth, wherever the English language is spoken or read, the doctrine of self-limitation* will be a ruling influence in the profession until a new era shall require a further advance, or science demand another expression.

Thrown out as a "picket" on this occasion, I will essay my little skirmish and return as speedily as possible to the main column, fortunate if the solitary shot bring down a single resisting error; more fortunate if it serve to open on any point a clearer view for the progress of the advancing hosts.

"Who did sin, this man, or his parents?" is a question daily asked, in one form or another, at the bedside of the sick. The frequent response, as well as the query, presupposes, in general, that disease is undoubtedly referable to some indiscretion on the

* In the discourse on Self-Limited Diseases," delivered before this Society at their Annual Meeting in May, 1835, by Jacob Bigelow, M.D., the author gives the following definition.

"By a self-limited disease, I would be understood to express one which receives limits from its own nature, and not from foreign influences; one which, after it has obtained foothold in the system, cannot in the present state of our knowledge be eradicated or abridged by art, — but to which there is due a certain succession of processes, to be completed in a certain time, which time and processes may vary with the constitution and condition of the patient, and may tend to death or to recovery, but are not known to be shortened or greatly changed by medical treatment."

part of the sufferer, to the errors of his progenitors, or, at least, to that

> "First disobedience, and the fruit
> Of that forbidden tree, whose mortal taste
> Brought death into the world and all our woe."

To show the fallacy involved in this question, and that the original answer was the true one — to show that disease is not an accident merely in the history of our race, due only to unwarrantable experiments with our powers of endurance, but rather, that DISEASE IS A PART OF THE PLAN OF CREATION — one of the myriad expressions of Divine thought — will form a leading object of the present discourse.

Modern geology has brought to light many wonders of the past. It has revealed to us unmistakable evidences of the existence on the earth of numerous classes of organized beings, long ages before the appearance of the human race. Animals then lived, flourished, and passed away. Individuals, then as now, had a limited existence, which death terminated. Some whole tribes, then as now, were so constituted that they could live only by the destruction of others. For this purpose they were provided with organs for seizing, tearing, and devouring their prey; while in some instances they seem to have been armed not only to destroy but to torture their victims. On the other hand, organs of defence were furnished to those in danger of assault, and means of escape given to to the weak. So that it is evident that the same strife prevailed in those early periods of the world's history as in the present times. In short, there were

voracious mammalia before man, but voracious reptiles before mammalia, and voracious fishes before reptiles. Moreover, much curious information has been acquired with regard to the structure and functions of the internal organs of these extinct animals. Not only has the nature of their food been ascertained by the half-digested remains of other animals found within some of these creatures, but the size and structure of the digestive organs themselves, their vascular surface, and the mucous membrane which lined them, have also been made evident by unequivocal marks on the surfaces of their contents. While from these and other appearances found in such fossil remains, the inference is unavoidable that these creatures must have been liable to functional disorders of the abdominal organs similar to those affecting animals of analogous structure at the present day.

As clear as these indications are of the nature and habits of these remote animals, and their consequent liability to derangement of function, the proofs of their liability to organic or structural diseases are complete and unassailable. Extensive enlargements by ossific inflammation have been discovered; as also cavities and outgrowths produced by abscesses. Specimens of caries and necrosis are not infrequent. Other marks of scrofuloid diseases are also recorded. Instances of anchylosis have been noticed; and reunion of fractured bones, with exostosis at the points of junction, have been described and figured. And more than this, evidences have been found of recovery from the most extensive lacerations involving

bony structures, by the fangs of other animals, where the individual must have have lived long enough afterward to allow the injuries to be repaired, as far as is ever possible after great loss of substance.

All these things we have most clearly demonstrated to us in addition to the necessary lethific action of physical causes, burning, freezing, suffocation, storms, natural poisons and the like, which also have existed through all time.

Thus it is evident that, from the beginning (using here the word in its widest geological meaning, and not simply in the narrow sense of the beginning of human existence), life has been subject to dangers, disorders and diseases, such as beset it in these latter days; and that it ever had essentially the same means of escape and modes of recovery. So that we are led to the inevitable conclusion, that as the existence and peculiar structures of these ancient animals afford proofs of design, generally acknowledged* to be most wonderful and convincing, so also their processes of recovery from disease and accident, no art having intervened, must be accepted as equally the result of intelligent contrivance.

In like manner animals now living, whether species continued from former ages, or those introduced

* We are aware that the idea of a "Great Artificer" is considered a "fetishistic conception," unworthy an educated man or an enlightened age, by some philosophers, who find an easy solution of all phenomena of Creation in "Persistence of Force," spontaneously generated, acting upon matter itself uncreatable. According to this theory all evils are incidental, to be self-eliminated at some future period. Till a nearer approach of that good time coming, our manner of dealing with the subject may be permitted, leaving the facts presented to be translated into other language, should any one ever think it worth while.

since the appearance of man, all are liable to disease and bodily infirmities. Though preying upon each other, the numbers thus destroyed probably bear but a limited proportion to those swept away by casual pestilence. Singly and silently, however, the many, when overtaken by disease, withdraw to some obscure and sheltered nook to await their fate — of recovery or death. If health return, they crawl out by degrees to the warmth of day; and many an awkward sportsman may have rejoiced over captures due less to his own skill than to the weakness of the convalescing victim. Usually such cases are isolated; and each loss, like that of a falling leaf, is unnoticed and unmissed. Occasionally an epidemic rages, and the destruction becomes excessive; while at times, "diseases of mysterious origin break out in the animal kingdom, and well nigh exterminate the tribes on which they fall."

As it is with wild, so it is with domestic animals. Diseases seize upon them in obedience to laws of which as yet little or nothing is known. Ordinarily they succumb, one by one, unnoticed except by their owners, or the scavenger and drayman. Now and then, however, the fold is infected, and its future hope endangered. Then the alarm spreads, and the whole country is aroused. In its ignorance and terror it sacrifices life without mercy, and treasure without discretion.

It were well for communities in general to give such subjects more careful study; and especially so for physicians, since "there is every reason," says an eminent authority, "for believing that pathology

in man would be greatly benefited by investigations of the diseases of animals."

And so it appears that disease is not only a part of the constant experience of animals, which could not have had any agency in the matter, and only submitted to the conditions imposed upon them, but that it obtained in the earliest indications of organized existence, and has continued uninterruptedly to the present time. No "mortal taste," but the will of the Creator determined and fashioned such a system of diseases — the evidences of which, foreshadowed in the beginning, become more and more apparent in the subsequent phases of Creation.

Turning now to the human family, whatever may have been its original condition, we find the "lapsed race" from the first pair, brought under the same general scheme. In no period of his life is man exempt from the incursions of disease, from infancy which wakes into an exanthem, to old age which sleeps "sans everything." Every organ has its peculiar diseases, every system of the body its own affections. No forecast or wisdom of the individual can with absolute certainty ward off or delay their attacks. To such an extent is this recognized, that the young adult who has passed through the so-called diseases of childhood is considered by statists of greater merchantable or insurable value, than one who has still to incur such dangers. Theories have been abundant to show how single diseases may be avoided; but it does not appear that any disease has as yet been removed from off the globe through man's agency. Flight to the mountains, or

to the uttermost parts of the earth, can at no period of life insure perfect exemption, and always at last proves unavailing. We know not even the secondary causes by which diseases are propagated, be they atmospheric, miasmatic, or animalcular. They have existed from the beginning, and, so far as we can at present divine, they will continue to exist through all time to come, or until they reach the termination assigned to them. So little are these causes understood, that in the usual incursion, spread and progress of the common diseases of successive years, not even the wind, that bloweth where it listeth, is less under the guidance or control of human agency or power. Though in all probability obedient to some general law, too subtle to be apprehended as yet, we are utterly unable to predict with certainty what even a day may bring forth of any disease in progress. When an epidemic appears, it often completely confounds all our conceptions of hygienic laws, as well as our preconceived notions of its nature or proper treatment. We cannot tell why it came, or when it will depart; or whether, under similar circumstances, it will again return. It marches on, often apparently without discrimination, over reputedly healthy districts; seizes on purified places, avoids the polluted, attacks the rich as well as the poor; subverting the theories of the learned and the predictions of the wise. Now and then we proclaim preventives, destined only to fail as the announcement escapes our lips. As we cannot bind the sweet influences of Pleiades, nor loose the bands of Orion, neither can we arrest the midnight pesti-

lence nor the noonday destruction; much less control in any degree the approach or violence of those terrific scourges which, in their appointed times and preördained courses, sweep over the nations, obeying Him only who rides upon the whirlwind and directs the storm.

Let us take a single case of disease, and observe what evidences of Design are exhibited in its regular series of phenomena and modifications. For example, let us take one of the simplest exanthems. It is unnecessary to particularize the minuter symptoms. It will be sufficient to notice its general history. For ten or fifteen days, more or less, after exposure to the morbific cause, called the period of incubation, the individual, though unaware of his condition, is as completely under the influence of the disease as at any subsequent period of its progress. As this stage closes, that of fever sets in, perhaps with some considerable degree of severity. Then, in two or three days, an eruption appears, beginning on the face and neck. On the next, or fifth day, it covers the body and extends to the extremities. On the sixth it begins to decline on the parts first affected, whilst it is vivid on the general surface. On the seventh, eighth and ninth, the eruption fades, in the order in which it came on, leaving the cuticle in a state of exfoliation.

Such is the history of one of the most common exanthems. Others of the class are not unlike it, in their general onset, progress and termination. No evidence of an intelligent contrivance can more distinctly indicate a plan, than that furnished by any

of these diseases. In the invasion, incubation, progress, culmination, decline and disappearance, they are as systematically pre-arranged, and as wonderfully wrought out, as is the life-history of any existence, vegetable or animal, in its conception, embryo, infancy, puberty, adult, middle and declining age. There cannot be adduced a greater proof of inventive thought, or varied contrivance, perfect in itself, in all its parts and as a whole, than that exhibited in any one of these diseases.

What is thus true with regard to exanthems, is also true of other diseases to a greater extent than it might at first be imagined. It may yet be shown that a state of incubation belongs to all diseases. One can hardly doubt it in acute cases, much less in chronic — implied even in the term itself. How seldom is health found to have been perfect up to the very moment of apparent invasion in typhus, typhoid, or inflammatory affections! How often rather is it not observable that some unappreciated discomfort, or perhaps some exaltation of spirits is confessed to, when a thorough investigation is attempted! It is often found that the more obstinate and ordinarily fatal diseases include multifarious weakening disorders, endured by the victim some time before their true nature is fully realized. Be this as it may, after a disease has taken its occupancy it follows certain laws peculiar to itself, as the lengthened histories of the books amply testify. These, though written for an entirely different purpose, reveal, if we read aright, a remarkable conformity to the idea which we have thus tried to develope.

May not what we have shown of the simplest morbid affections be also true of the more complicated and less understood diseases, such as those of the blood, for instance, or of the nervous system, which the acutest observers have failed to explain? We hear often of metastasis. An internal organ gives evidence of a severe attack. All at once the local symptoms abate, and a distant part, an extremity perhaps, is seized with exquisite tenderness and intolerable pain. Hardly does this subside before terrific agony affects the head, and the patient sinks in the frightful struggles of mania. Theory explains that in the internal organ first attacked, pus or such-like morbid matter was evolved; that this, taken up by the adjacent veins, was carried to the extremity by the veins of that part; and that when the last change occurred, it was effected in a similar way in the direction of the head. Post-mortem existence of pus in the several parts is considered proof positive of the truth of the hypothesis. Or else, that the pus taken up by the veins and carried to the heart, is forced through the arteries by that organ to the other parts subsequently affected. But how, in the first instance, can veins whose currents run in the same direction or towards a common centre, carry fluids or other matter in opposite directions? Or, on the second supposition, can we imagine that pus can go unaltered through the whole circuit of the circulation without poisoning the whole system rather than a remote part? Besides, the formation of the pus in the first instance is left unaccounted for. Is it not more rational to think that the original

morbific cause, after incubation sufficient to saturate the system, manifested itself, first, in the internal organ, next, in the extremity, and lastly, in the head; the outward demonstrations being only consecutive attendants on the one unexplained moving cause?

Acute rheumatism may also further illustrate our meaning. This disease, with one central, constitutional morbific cause, shows itself on the outposts in most astonishing ways — now at the end of one extremity, and in a moment, as it were, leaving that part to appear in a distant one diagonally opposite. When fixed upon any portion, no one can with any certainty hasten or retard its departure, say how long it will remain, or predict what will be its next point of attack. Each new case is a new enigma. How curiously planned, how varied in uniformity, how singularly wrought out! No finite intelligence could ever have originated such a combination; no human intellect ever approached it in subtilty of contrivance.

But instances need not be multiplied. There is hardly a disease which will not afford, if studied in this view, an example of wondrous designing power. All the resources of art would be unavailing in an attempt to originate one even of the simplest specific diseases. Great is the mystery that overhangs the nature of morbific causes. The highest intellects have proved incompetent to its solution. Volumes have been written to elucidate it, still the mystery remains as deeply sealed up as in the days of the earliest observers. But the inference is unavoidable, that if the human mind cannot unravel the mar-

vels of a disease with all its attendant and antecedent phenomena, and much less find its morbific cause, it must have required a higher intellect than any created to have combined these agents, and arranged the laws by which the whole are governed.

Not less worthy of notice are the different susceptibilities of different individuals to any single disease; and of a single individual to different diseases. When the seeds of disease are scattered abroad, many fall into unprepared systems, and after springing up, quickly wither away; not every acorn becomes an oak. Let a large number be simultaneously exposed to contagion: one portion would soon sink under its influence; another would be severely affected; still another, and perhaps the largest, would suffer moderately; while a few, or many as the case might be, would pass unscathed, entirely unaffected by its presence. In a great number this susceptibility would be exhausted by one attack, so that the subjects could bear any amount of subsequent exposure with impunity. On the other hand, a few would receive the disease a second, and some even a third time. This difference of susceptibility obtains in regard to most if not all diseases, and to the protective power in many — how many is not yet fully ascertained. In other cases, however, one attack only predisposes to its repetition. In this respect, also, there seems to be a graduated scale, arranged with forethought and planned by intelligence. And all this is true no less of individuals than of classes.

Again, diseases are distributed through the different seasons of the year with such a degree of con-

stancy that the seasons themselves are sometimes spoken of as the causes of the diseases. But a little reflection will enable one to see that, in the nature of things, there is no essential or known reason why diseases of the bronchial mucous membrane should prevail in winter, or those of the intestinal mucous membrane in the summer; why the plague should prefer heat, and variola cold for their devastations.

In like manner the appearance and peculiar characteristics of common diseases in ordinary seasons, or the severer cases of epidemics in all seasons, may never be satisfactorily accounted for by the external surroundings of the victims. After most careful investigations, writers are as yet compelled to admit that there must be some unknown condition, some cause not understood, other than the poverty, privations, filth and position of those attacked. The simple explanation is to be found in the idea of an original Plan, as we are attempting to demonstrate. With this as the guiding idea, how much more intelligible become such investigations of disease; how much easier the unravelling of the laws which govern organized existence; how much time saved, now lost in fruitless search for specific causes!

Other evidences of Design and fixed law may be noticed in the general averages of sickness and mortality. These are such and so constant that insurers can calculate with accuracy their probable losses from one decade to another, though their patrons are selected from the most vigorous and favored classes; and any community can estimate,

if it chooses, its loss of time by sickness, so as to provide beforehand for the coming emergencies of future years.

The geographical distribution of the various animals and plants within certain limits, a discovery which has given additional interest to natural science in our day, is not more remarkable than the geographical distribution of diseases. While some seem to be almost cosmopolitan in their extent, others are confined to restricted localities, beyond which, without any apparent reason, they seem unwilling to go. As some plants thrive best in connection with others, or in near proximity, so there are diseases which seem to have a mutual affinity, or appear generally in connection with each other; while, on the other hand, some unexplained antagonisms and complements exist among diseases not unlike those observed in the vegetable kingdom.

Furthermore, that power peculiar to organized beings, which enables them to endure, within wide limits, all kinds of physical changes and exhausting influences, is no less remarkable in the tolerance of diseases. This "reserved force" seems a preliminary necessity to the possibility of disease, or at least to recovery from it. Without this reserved force, ordinary functions would be in constant danger of interruption or absolute destruction. With it, the severest malady may pass through all its stages to perfect recovery, without, in the end, greatly injuring the individual. This will appear a more remarkable provision when we consider that during disease the ordinary supply of nourishment for the

development of force is declined by the patient, and often only so much is admitted as may be barely sufficient to continue existence. We do wrong to call this, or any phase of it, a *vis medicatrix*— a term (the sooner discarded the better) involving theories long since abandoned, and now almost forgotten. It is simply a vital principle of endurance, sustaining the organism through all the period of disease, as necessary at the outset as at the close.

Such are some of the evidences of forethought and design in the introduction of diseases. These evidences are to be seen in the fossil remains of animals which lived and suffered long before man appeared upon the earth. They are to be seen in the diseases of animals now existing—in the wild which avoid, and in the domestic which cling to the abodes of the human race. They are to be seen more universally, and more completely, developed in man himself, as, from the cradle to the grave, he passes through one experience to another by allotted stages. They are to be seen in the histories of separate diseases so systematically and mysteriously constructed; and in their geographical distribution, periodicity, modes of onset, and decline. Additional evidences are also to be seen in the different susceptibilities of individuals, and in the power of endurance possessed by all. From whatever point the subject is viewed, increasing evidences arise of intelligent and inventive authorship. On all sides these evidences are of the same kind as adduced to show Design in other operations of nature; and if admitted anywhere, we must admit its manifest revelation

in the devising and the orderly contrivance of diseases.*

Thus it appears that the idea of Diseases must have originated in the Creator's mind, and its development formed a part of the Plan of Creation from the beginning. The ultimate purpose of such a Plan is not for man to determine. Deliberately devised, diseases do not necessarily imply "gratuitous malevolence;" for, despite of some philosophers, it is quite possible to conceive of "the earth and all that is therein," simply as an expression of Divine thought, without reference to the question of good and evil. But to repel such censure is foreign to our present purpose; *whatever is*, is enough for us as scientific men now to consider, humbly acknowledging that "in the Divine government the matter of fact always determines the question of right, and that whatever has been done by Him, who rendereth no account to man of his matters, He had in all ages and in all places an unchallenged right to do."

Such being the facts, though it may never be explained why organized existence always has been, and until a new order of things has arisen always will be, subject to diseases, yet the extrication of

* *Nota Bene.* The limits of this Discourse admitted only of a restricted development of the argument from diseases in animals; that from diseases in the vegetable kingdom, exhibited in every orchard and grove, is equally impressive and convincing.

For the same reason idiopathic diseases only (those "realities" manifested in "a series of consecutive changes") have been considered. Disorders (irregular or disturbed performance of function) afford equally good illustrations of plan, in the laws which govern them, and in the subsequent restoration from their effects.

what cannot be explained from what may, is no small addition to any science. Recognizing such limitations, we shall not, like the great men whom Hippocrates so ingeniously refuted (for there were great physicians before his time), labor to refer all the afflictions of the race "to hot, or cold, or wet, or dry;" nor to "figments called inflammations," which have been so quick to disappear under the tests of our own day; nor to any of the many other theories which in the interval have had their short-lived career. But we shall consider the causes of diseases as primitive purposes, as much so as electricity or gravitation, and proceeding as with those subjects, we shall study their development and the phenomena to which they give rise, with more satisfaction to ourselves and benefit to the sick, and with the positive enlargement of our science.

Since these things are so, it may perhaps be said that we may as well fold our hands, and resign ourselves with indifference to whatever fate may befal us. By no means. The storm may arise and the winds blow, but we may seek shelter from the former, or wrap our mantles closer to exclude the latter. Even against the inconveniences of a summer shower we may oppose the delicate contrivances of modern invention. But it does follow that we may not attempt to attack the laws of nature with any hope of arresting the fury of the elements, or the influence of their disturbances. We may indeed estimate their forces, calculate their movements, and, having possessed ourselves of all that is known of them, govern our conduct so as in many cases to avoid

them in the outset, or at least to mitigate the evils in their train, or to take advantage of whatever of good can be derived from their presence.

So with regard to diseases, we may not have it in our power to banish their elements from existence; we may not often prevent their coming, nor be able to stay their progress; we may not jugulate or break them up at pleasure when once they have seized upon us, nor greatly shorten their continuance; we may not amend their destructive characters, nor very sensibly diminish average mortality; — nevertheless, suitably recognizing their place in the great Plan of Creation, and acquiring as full knowledge as possible of their phenomena, with a just estimate of human power, we may seek, with some certainty of success, to evade their approach, or to save ourselves from many of the inconveniences and dangers of their attacks. Thus, when a disease "has obtained a foothold in the system," we may remove as far as possible obstacles to the natural progress of its "succession of processes," and sustain the system as well as may be in its power of endurance, until these processes are duly and safely completed. To do this to perfection, is no easy matter. It will require a greater knowledge of disease than any individual, however learned, has yet acquired; a more thorough investigation of each separate case than is now made by the most pains-taking practitioner; a more complete mastery and discriminating use of all the appliances of our art than heretofore possessed; and a more absolute and abiding control of the patient and his surroundings than was ever yet

granted to any medical attendant. Possibly the Profession and the Public may hereafter be educated up to such a state of perfection in the management of the sick; though, as yet, even the profession seems not quite willing to fully accept all that is already known of the nature and laws of disease.

"The physician," says the learned translator of Hippocrates, "who cannot inform his patient what would be the probable issue of his complaint, if allowed to follow its natural course, is not qualified to prescribe any rational plan for its cure." But how small a proportion of the profession could consistently practise their calling for a single day, were this test strictly exacted! Who among us ever saw a disease allowed to follow its natural course to its termination, unless, bolder than his neighbors, he risked the denunciation of his peers and dared by himself to try the experiment? Yet the trial is not so dangerous as formerly believed; and if entered upon as unhesitatingly and with the same confident expectation that newly vaunted remedies are often given, more "wonderful cures" would be witnessed than were ever related in the books. The time is coming, perhaps it is nearer than we are aware, when the public shall no longer consider the proper care of the sick (their true *cure*) to consist in the mysterious and indispensable administration of drugs, but in rationally and understandingly attending to all their necessities; when the young aspirant for patronage shall not find it necessary, in order to satisfy the bystanders, to write his recipe before he has examined his patient, or to authoritatively an-

nounce the name of the disease before he has had time to comprehend the symptoms; — and there is no reason why the profession should not now, by lofty endeavor and combined action, successfully strive to bring about such a desirable result. When this is accomplished, the not unreasonable requirement above quoted may then be fully accepted. At any rate, it is time that the education of pupils in the study of disease should be founded on a new basis. Not a school in Christendom ever yet afforded proper opportunities, if any at all, for studying the natural course of diseases. Under different teachers, if we may credit eminent authorities and our own observations, the same disease may assume different outward appearances, according as the several "courses of treatment" may differ from each other. While, too often, students are led to believe that all the recoveries they have seen have been due to the prescriptions selected for them; and they go out into the world under the apprehension that if they do not generally "cure" disease, it will be from not having the good fortune to hit upon the right course of medication. The exhibition of a multifarious mixture, in order perchance to include the right ingredient, is not merely a fitting, but the most obvious corollary to their previous instruction. To most men, years of anxious and much unsatisfactory experience; to some, a whole life of disappointment ending in utter scepticism of the value of medicine, are the results of such erroneous beginnings.

The doctrine we have advanced and advocated leads to a different procedure. It leads to an aban-

donment of the old notions of the primary causes of diseases. It leads to a new view of the purpose of diseases themselves. It shows the idea untenable that disease is an evil only to be expelled from the system by some antagonistic power, the *vis medicatrix*, for example; or by a new and incompatible disease artificially induced; or that it is in itself an effort (*conamen*) to expel from the body an enemy already in possession; — but that it is one of the attendants of life, instituted in the Beginning. And, ignoring none of the real acquisitions of the past, this doctrine divests the truth of many of the errors which have thus far impeded its progress.

This doctrine being accepted, the proper acquisition of our art will demand of students, in the first place, a thorough knowledge of the body in its healthy condition — its organic structure, its outward form, and its internal functions; and secondly, the investigation of the natural phenomena of disease *undisturbed by medication*, as a necessary preliminary to its proper management. It will require of them also a careful study of the operations of the mind as affecting the body, and their mutual reactions upon each other, in health as well as in disease — health and disease being parts of one great Plan, and often intricately involved in each other. In these directions medical education has been deficient, and subsequent attention in after-life remiss. Let coming students take warning from the deficiencies and failings of those who have preceded them. Let them thus, properly grounded, and not till then, proceed to study the effects of accepted

remedial agents. Every step from such a base will be a true progress for themselves and their science, no disappointment or scepticism ensuing. Every advance in this way will be in the right direction — *nulla vestigia retrorsum.*

Of late years it has been quite common to vaunt the power man may have over plants and animals in modifying their form, color, growth and other qualities, and to adduce this as an argument in favor of a similar power over diseases. But the two things are far from being analogous. It is one thing to raise a few deformed sheep, or to increase the number of vertebræ of birds from generation to generation, by so-called "selective breeding;" and quite another thing to modify the course and termination of disease in a particular individual. They are separate matters, bound by no logical sequence. The one must necessarily be limited to the life of an individual, or only to the period of a disease in an individual; the other may, nay, must extend through successive generations for successive ages. Besides, the permanency of species has not yet been disproved, and it will be time enough to use such arguments when dogs are actually bred from wolves, or an ape unquestionably transformed into a human being.

While admiring the activity in our schools, the facilities of instruction and of clinical observations at our hospitals, the zeal of societies, the energy of individuals, and all the various helps to professional advancement, now so multiplied and abundant, one cannot but regret the still prevalent tendency to recur

so readily to second causes, and to impede the advancement of medical science by claiming for it more than is consistent with actual truth. The medical press, so often boasted of as the great disseminator of medical knowledge, is still too often the vehicle of false philosophy and unworthy assumptions. False facts, false reasoning, and non-sequitur conclusions fill up a large portion of periodical publications. Even the more stately volume seems incomplete without its remarkable cases selected for an object, and its infallible formulæ, which perhaps have never had a trial. An author who shall candidly relate his own experience in ordinary cases, of expectations disappointed and unsuccessful issues following the employment of reputed infallible agents (and such cases only), would richly deserve, if he did not receive, the thanks of the profession, and be indeed "more than armies to the common weal."

BRETHREN:

Fashions in medication are fluctuating and fleeting. Each age flatters itself that it has made a great advance over the previous, and has reached at last something established and permanent. But we smile at the notions of our predecessors, only to be laughed at by those who come after us. Time was, men are living who remember it, when pneumonia was considered a fatal complaint, unless subdued by venesection at its onset; now it is instanced as the purest example of a self-limited disease. Time was, physicians are with us who thus practised,

when spasmodic croup, so-called, was believed to be an imminently dangerous disease if the external jugular vein were not immediately opened; now it is known to be a comparatively harmless accompaniment of another disorder, needing in itself no special interference. Time was, our own day embraces it, when it was publicly taught that mercury to salivation was not only the specific, or antidote, for iritis, but absolutely essential to its successful treatment; now, one of our number has been justly called a public benefactor for showing that such practice is not only unnecessary, but often grievously detrimental in that affection. But why multiply examples? So it has been, and so it will ever continue to be, until more correct views are acquired of the Plan of Creation, and of human powers under it. The great facts of our science are permanent, and, however feebly stated from time to time, or hesitatingly received, will at last prevail and triumph. False assumptions are dangerous expedients, which the most ignorant will ever be most likely to practise upon. Truth is weakened by any addition of error; and the profession that allows it must in the end abandon its own self-respect. The remedy is in our own hands; let us be heroic enough to apply it in season.

"Medicine," says our American Hippocrates, "is the art of understanding diseases, and of curing or relieving them when possible." To this sage remark it may be added that a Doctor of medicine should also teach the patient and the friends to acquiesce in an intelligent submission to the laws of disease;

laws as manifest and inflexible as those of health. This done, the Profession will acquire a dignity before unknown to it; and the Attendant will become an enlightened guide, instead of an uncertain and bewildering dealer out of nostrums.

To turn increasing attention in the direction indicated, we ventured on the perilous duty of to-day. Let us hope that as impediments are one by one removed, progress may be easier in time to come. There is nothing in time past to discourage renewed effort. Though yet afar off, the goal is nevertheless in sight. The present time is propitious. Allied sciences are on the move. It is for us to hasten on, and to display our standard in the foremost ranks. Thus shall we better satisfy the demands of the age, and truly ennoble our Profession.

BRETHREN,

During the past year, twenty-two of our number have yielded to the common fate of mortality. The Secretary's list, which he read to-day, has given us, name by name, the melancholy announcement. The courteous Bartlett, the munificent Walker, the genial and true-hearted Coale, the brave and tender-hearted Sargent, and our other martyrs, Fox, Heath and Hoyt, with other well-known and cherished friends, have gone to their rest. We strew the fresh-turned mound with cypress mingled with laurel, and kindly drop the tear of friendship, as, imitating their example, we press

earnestly forward to the struggles remaining before us. Faithfully and loyally they served the cause of humanity and of country; ardently would we recount their virtues, and forever hold them in honored remembrance.

NOTES.

PAGE 353, LINE 1.

Il faut toujours en revenir à cette triste vérité que la médicine est la plus noble des métiers. — *Gaz. Med. de Paris*, 1851, Tom. v. p. 448.

"Medicus sum, non vero formularum medicarum præscriptor; quas ego duas, sive *artes*, sive *dotes*, sive etiam *provincias*, appellare libeat, toto cœlo a se invicem distare arbitror." SYDENHAM, *Dist. Epist.*, §42.

Said an esteemed friend, as we left the hall last annual meeting, "So, you read next year; well, don't give us any of your heresy"! The exordium of this Discourse was written that evening.

PAGE 354, LINE 30.

See a list of publications in "Expositions of Rational Medicine," by Jacob Bigelow, M.D., Boston, 1858, pp. 57–60. Several other well-known papers have been published since that date.

PAGE 355, LINE 18.

"Upon his taking his place as lord of the terrestrial creations, a specific injunction was given, guarded by a penalty for its violation: 'In the day thou eatest thereof thou shalt surely die.' But having taken upon himself the fearful responsibility of casting off the authority of his rightful sovereign, he came to disregard all wholesome laws, whether outspoken from the cloud upon Sinai, or written upon the organism of his physical nature; hence the insane perversions in physiology and psychology, including the poisoning of the senses of taste and smell, those faithful guardians of life and health and beauty; and hence the thousand forms of disease that flesh is now heir to."—*Health: its Friends and its Foes*, by R. D. MUSSEY, M.D., LL.D., Boston, 1862, pp. 190, 191.

"Hence the disorder and disease; hence the groaning and travailing together of the whole creation; it is all the supernatural work, the bad miracle of sin." *Bushnell's Nature and the Supernatural*, New York, 1861, p. 218.

"Medicines are created by our offended God to relieve diseases which all originate in sin." *Scott's Comm., Vol. Matt.—John*, p. 650, Philadelphia, 1860.

Miss Nightingale, whose influence exceeds in effect a score of such writers, takes a diametrically opposite view of such matters. She speaks of diseases as "conditions, like a dirty and a clean condition, and just as much under our control, * * * conditions in which we have placed ourselves;" and seems to think that we can originate diseases at will. She says:

"I have seen with my eyes and smelt with my nose smallpox growing up in first specimens, either in close rooms, or in over-crowded wards, where it could not by any possibility have been 'caught,' but must have begun."

"Nay more, I have seen diseases begin, grow up, and pass into one another." *Notes on Nursing*, p. 26, *note*.

Disrespectful as it may seem, one can hardly repress the exclamation, "Oh, Gammer, what big eyes you've got!"

PAGE 356, LINE 7.

We quote the answer, for the benefit of those who may not remember it! "Jesus answered, Neither hath this man sinned, nor his parents; but that the works of God should be made manifest in him." JOHN ix. 3.

PAGE 356, LINE 16.

See Miller, "Testimony of the Rocks;" Buckland, "Reliquiæ Diluvianæ;" "Bridgewater Treatise;" Mantell, &c.

PAGE 536, LINE 22.

"Fossil sharks, with weapons so murderous, that they must have been, according to Agassiz, the pirates of that period." MILLER, "*Old Red Sandstone*," p. 215.

PAGE 356, LINE 27.

For description of the sting of the Pleuracanthus, offensive organs, and defensive armor of other animals, see "Testimony of the Rocks," pp. 99 *et seq*.

PAGE 357, LINES 6–12.

See Buckland's Bridgewater Treatise, pp. 187–201.

PAGE 357, LINE 13.

Buckland, *ib*. p. 190, *note*. "The quantity of this coprolite is prodigious, when compared with the size of the animal in which it occurs; and if we were not acquainted with the powers of the digestive organs of reptiles and fishes, and their capacity of gorging the larger animals that form their prey; the great space within these fossil skeletons of Ichthyosauri, which is occasionally filled with coprolitic matter, would appear inexplicable."

PAGE 357, LINE 23, to PAGE 358, LINE 4.

Mr. Clift's case, see Buckland, Reliquiæ Diluvianæ, p. 74. Cuvier, Ossemens Fossiles, Vol. iv. p. 396 and plate. See also Zies, "Beschreibung mehrerer kranker Knochen vorweltliche Thiere," Leipzig, 1856. A resumé, with additional descriptions of specimens in the Dresden Collections.

PAGE 359, LINE 1.

According to Dr. Livingston, "many diseases prevail among wild animals" in South Africa. *Researches*, p. 149.

See Recherches de Pathologie Comparée, par Ch. F. Heusinger. Cassel, 1848.

PAGE 359, LINE 17.

Hugh Miller, Old Red Sandstone, p. 222; which see also for several noted instances of epidemics.

See "Traité d'Hygiène Agricole, par F. A. Rufewer. 8vo., Friburg, 1858.

See also a valuable work, "Die Einimpfung der Lungenseuche des Kindviches," &c. J. M. KREUTZER, 8vo., Erlangen, 1854.

PAGE 359, LINE 24.

"Spemque, gregemque simul, cunctamque ab origine gentem."
Georgic iii., l. 473.

PAGE 359, LINE 27.

"At length she strikes a universal blow;
To death at once whole herds of cattle go."
Dryden's Georgics, iii., lines 827–8.

PAGE 329, LINE 32.

Sir James Forbes, M.D., "Nature and Art in the Cure of Disease," p. 46.

PAGE 361, LINE 6.

Sir Henry Holland, M.D., "Medical Notes and Reflections," Chap. xxvi. T. Thompson, Annals of Influenza, p. 385; and others.

PAGE 361, LINE 26.

"It is a fact that the Asiatic cholera twice spared the poor Jews, in 'The Ghetto,' who live most crowded, filthily, and with bad nourishment." *Letter from* DR. VALERJ, *of Rome.*

Instances abound in all authors on the subject.

PAGE 362, LINE 27.

Marshall Hall, "Theory and Practice." Article, *Measles.*

PAGE 363, LINE 14.

"The poison which generates cholera" "certainly possesses in an extraordinary degree the properties which all other morbid poisons possess in some degree, of lying latent for a length of time, in certain localities, or in the constitutions of individuals, or both," &c. *Cyclop. Pract. Med.*, Vol. iii. p. 25.

PAGE 364, LINE 12.

This case occurred while writing this part of the Discourse. The explanation given is that of the eminent gentleman in attendance. Copeland says of another case of Metastasis, "The transfer was instantaneous," * * * "the medium being evidently the nervous system." *Dict. Prac. Med.*, Article *Disease*, §173A.

PAGE 367, LINE 16.

Cyclopedia Pract. Med., Vol. iii. pp. 251 *et seq.*

PAGE 367, LINE 29.

So stated to me by agents of known ability. See also Reports to Legislature, on Insurance, &c.

Memorial, Boston Sanitary Association, pp. 9 *et seq.*, Boston, 1861.

PAGE 368, LINE 4.

First sketched out in its great outlines by Humboldt, and most fully demonstrated for the class of mollusks in their distribution along our coast by our President, Dr. A. A. Gould, in 1840. See Invertebrata of Massachusetts, p. 315. Also Proceedings of Boston Nat. Hist. Soc., Vol. iii. p. 483. U. S. Exploring Expedition, Mollusca, pp. 9 *et seq.*

PAGE 368, LINE 8.

"On peut donc dire avec une parfaite exactitude, des maladies, considérées au point de vue géographique, comme des végétaux, qu'elles ont leurs *habitats*, leurs stations, leurs limites, sous le triple rapport de la latitude, de l'altitude et même de la longitude géographique."—BOUDIN, *Traité de Géographie et de Statistique Médicale*, Paris, 1857, Vol. ii. p. 227.

PAGE 368, LINE 18.

Cretinism denotes Goitre in the same country. In central Europe, typhoid fever accompanies phthisis. — BOUDIN.

Intermittent fever and phthisis are not usually prevalent in the same locality.

Wherever Calopogon is met with, one may expect to find Arethusa in close proximity.

The thistle is destructive to oats; erigeron, to wheat; scabious, to flax.

In the United States, some diseases (phthisis, *e. g.*) diminish from the North to the South, while others (abdominal fevers) increase in the same direction.—Dr. A. A. Gould, *resumé U. S. Census*, 1860, in Mass. Registration Report, 1861, 53, and 1862, p. 48.

Page 370, Line 5.

Dr. Brown thus quaintly states a popular belief: "A brisk fever clarifies the entire man * * * it is like cleaning a chimney by setting it on fire; it is perilous, but thorough."—*Spare Hours*, p. 206.

Said El Hadgi the Fakir, quite as sensibly, "Welcome the disease, if it bring thee acquainted with a wise physician. For saith the poet, 'It is well to have fallen to the earth, if while grovelling there thou shalt discover a diamond.'"—*Chronicles of the Canongate*, Vol. ii. p. 139.

Page 370, Line 20.

Hugh Miller, Testimony of the Rocks, p. 104.

Page 371, Line 4.

Hippocrates, Ancient Medicine, §15, Ed. Sydenham Soc.

"Argument" by Dr. Adams, *ib.* p. 158.

Page 372, Line 11.

"La proportion des décès est loin d'avoir diminué avec l'accroissement du nombre des médecins."—Boudin, Vol. ii. p. 84.

Page 372, Line 17.

"Dit M. Quetelet, 'L'art de guérir exerce peu d'influence sur le nombre des décès, mais il en a beaucoup pour améliorer phisiquement le peuple. Il diminue la somme des douleurs,' &c."—*Ib.* p. 86.

Page 373, Line 1.

Any one who may fear that his occupation will be gone, should he admit the possibility of treating disease without drugs, will find the daily routine of a Rational Physician well set forth in the following extract:

"The medical man will find ample scope for the exercise of his faculties, even in cases where special drugging may not be requisite. Close attention, acute observation, and the expenditure of not a little time, will be indispensable on his part, in order to effectually act upon modified health—laws in regard to rest, the many nice points connected with diet, the hygrometric condition, temperature, and free circulation of the air, change of air, clothing, cleanliness, &c. His attention must also be directed to exciting or aggravating causes of disease in the locality, the residence, the room, or the person of the patient. He will, moreover,

have to take care that the mind of the sufferer is kept in as tranquil a condition as circumstances will admit of," &c.— *Rational Medicine; The Hunterian Oration for* 1860, by S. H. WARD, M.D., &c., p. 48.

PAGE 373, LINE 6.

" If what is really *known* of the laws of disease were told to the members of the profession, more than half of them would indignantly discredit it," said an eminent pathologist to the writer a few months since.

PAGE 373, LINE 7.

Dr. Francis Adams, LL.D., Life of Hippocrates, p. 18. *Ed. Sydenham Soc.*

PAGE 373, LINE 18.

For " baneful effects " of trusting to nature, see Cullen's preface to his Practice of Physic.

PAGE 373, LINE 26.

" He who gives the least medicine, and that of the least offensive kind, is coming to be regarded as the best physician. It is, by the intelligent head of a family, held no impeachment of a physician's skill that he leaves no recipe, and directs measures so simple as to reflect no mystery on his craft."— *Boston Post* (*newspaper*), July, 1864.

PAGE 373, LINE 31.

Baglivi, Hippocrates *Romanus* ab Aliberto vocatus, ait: " In curatione morborum, qui moram aliquam admittunt hoc ordine progredior. Prima die totus sum in examinando, &c. * * * Secunda die diligentius consideratis rebus antedictis, morbi speciem tandem decerno, et exinde remedia opportuna præscribere incipio."— *Prax. Med.*, p. 110.

PAGE 374, LINE 10.

Possibly there is an exception in Russia. " Dr. Hawrowitz, Physician to Prince Constantine, told me," said Dr. Roeser, Physician to the late King Otho, to the writer, " that the mortality in the hospital of the old Russians at Moskowa — who consider by their faith disease as a punishment by God, and the application of medicines for that reason a sin — is not greater, if not less, than in other hospitals. They apply only cleanliness and good nourishment."— *MS. Notes of a Visit to Athens, Greece*, 1860.

The result thus stated agrees with our own experience. In the epidemics of 1847–8, we took care of over three hundred cases of typhus fever without administering drugs. The cases were taken indiscriminately, including those in a dying state when first seen. The result was thirty-one deaths in three hundred and seven cases. In an epidemic

of scarlet fever in 1848–9, out of eighty-one cases so cared for, seventy-seven recovered. With every attention to the comfort of the sick and as thorough nursing as possible, the progress of the disease was as tolerable, its continuance as short as, and dangerous sequelæ less frequent than in other cases more "actively treated." In 1849, of forty cases of measles, thirty-nine recovered. The writer sometimes takes care of the more painful diseases, rheumatism for instance, without drugs. It requires greater patience and painstaking on the part of the practitioner, but the result is satisfactory. "I had not time," said a prominent physician the other day in the writer's hearing, "to persuade the family that the patient did not need any medicine, so I wrote a prescription and departed."

PAGE 374, LINE 16.

"Nam sæpe accidit ut facies morbi variet pro vario medicandi processu, ac nonnulla symptomata non tam morbo, quam medico debentur." SYDENHAM, *Observ. Med.*, §10.

Baglivi and others have similar expressions.

"The constant interference of art, in the form of medical treatment, with the normal processes of disease, has not only had the frequent effect of distorting them in reality, but, even when it failed to do so, has created the belief that *it did so*; leading in either case to an inference equally wrong — the false picture, in the one instance, being supposed to be true; the true picture, in the other, being supposed to be false."—Sir J. FORBES, *Nature, &c.* p. 6.

PAGE 375, LINES 5–8.

"'Vis medicatrix naturæ' is a favorite professional expression, a time-hallowed portion of medical phraseology. * * * Is there indeed, among other wonders of our corporeal being, a subtle force, inherent in the very organization itself, whose office it is to protect vitality, in its very arcana — to correct errors of function, and restore lesions of structure? So our accepted phraseology implies."—*Address before the Kentucky State Med. Society*, by J. B. FLINT, M.D., Pres't Soc., 1859, pp. 8–9.

"The conversion of the original disease into another is occasionally salutary." * * * "It is a very common object of art to produce this kind of conversion."—*Pract. Principles of Medicine*, by J. CONOLLY — *Cyclop. Pr. Med.*, Vol. iii. p. 272.

"Dictat Ratio (si quid ego hic judico), Morbum, quantumlibet ejus causæ humano corpori adversentur, nihil esse aliud quam Naturæ conamen, materiæ morbificæ exterminationem in ægri salutem omni spe molientis."—SYDENHAM, *Observationes Med.*, §1. Quis circulus in probando!

"Helmetius, et parum ab eo discedens Campanella crediderunt febrem non esse morbum, sed morbi remedium, * * * ut peccantem materiem humoribus confusam eliminaret."—BAGLIVI, *Prax. Med.*, p. 72.

PAGE 375, LINE 17.

As one illustration of the little estimation in which even now such matters are held, it may be stated that, winter before last, of a class of more than two hundred students invited by the writer to attend a free course of lessons in Art-Anatomy by a competent teacher, with living models, less than twenty-five ever made their appearance, and only three or four continued through the course. One of these last has since had abundant reason to congratulate himself for his attention to these teachings.

PAGE 375, LINE 30.

"It may now be affirmed that the practitioners of the present day are, speaking generally, almost as uninformed in this particular [the natural course and event of diseases] as were their predecessors fifty or a hundred years back."—Sir J. FORBES, *Nature and Art, &c.*, p. 5.

PAGE 376, LINE 14.

See "Origin of Species," by T. H. Huxley, F.R.S., 1863, pp. 94–100.

PAGE 377, LINE 12.

"I remember to have been shown a manuscript copy of a New Practice of Physic, wherein the first article that catched my eye was on the scrofulous distemper, towards the end of which I perceived the word CURE in capital letters, followed by a number of recipes, which I immediately perused with the greatest eagerness, and then asked the author if he had known many instances of cures performed by those prescriptions. 'I never knew one in my life,' replied he; 'but of what service would it be to describe a disease, if after the description I did not add the cure?'"—*Med. Sketches*, by J. MOORE, M.D., Lond., 1786, p. 64.

PAGE 377, LINE 16.

It is not improbable that such a work from a fully competent hand may be given to the Profession before many years.

PAGE 377, LINE 29.

Mass. Medical Society Communications, 1863, p. 260.

PAGE 378, LINE 11.

See "Practical Guide to the Study of the Diseases of the Eye," by Henry W. Williams, M.D., Boston, 1862, pp. 126–30.

PAGE 378, LINE 21.

"Un signe infaillible qu'une science n'est pas constituée c'est quand elle est encore une sorte de propriété commune. Mon portier n'hésitera pas à definir la maladie, à indiquer la cause, à prescrire le remède, et à

prédire l'issue. Il s'en croit le droit; et il parait l'avoir, car on n'hésitera pas davantage à ecouter son avis et souvent à le suivre."—*La Médecine et Les Médecins*, Paris, 1857, Vol. i. chap. i.

PAGE 378, LINE 27.

See "Rational Medicine," by Jacob Bigelow, M.D., p. 29.

PAGE 378, LINE 31.

"Even a moderate amount of knowledge of the general nature of diseases, and of the mode of operation and powers of the medical art, will make a man a better patient; make him more content with the treatment prescribed, be it energetic or inert; and make him repose greater confidence in his physician."—Sir J. FORBES, *Nature and Art*, p. 14.

LIST OF DECEASED FELLOWS.

Admitted.	Name.	Residence.	Date of Decease.	Age.
1838	Barstow, Gideon F.	Salem.	June 5, 1864	
1832	Bartlett, George.	Boston.	Sept. 24, 1864	57
1849	Bomer, J. Edward.	Ipswich.	—— 1865	45
1855	Brown, J. H.	West Newton.	March 19, 1865	52
1821	Brown, Silas.	N. Wilmington.	Sept. 15, 1864	85
1848	Chamberlain Levi.	New Salem.	—— 1865	
1837	Chase, Charles.	Deerfield, N. H.		56
1843	Coale, Wm. Edward	Boston.	April 24, 1865	49
1854	Clapp, Fayette.	Lee Centre, Ill.	Aug. 20, 1864	41
1843	Fisk, Seth,	N. Amherst	June 10, 1864	66
1862	Fox, John L.	U. S. N.	Dec. 17, 1864	54
1843	Gay Grenville W.	Bath, Me.	Jan. 2, 1865	
1823	Harris, Luther M.	Jamaica Plain	Jan. 28, 1865	78
1852	Heath, Wm. Henry	Stoneham	Aug. 28, 1864	36
1847	Hinckley John W.	East Boston	March 28, 1865	44
1862	Hoyt, Dixi Crosby	Milford	Nov. 2, 1864	31
1850	Huse, Stephen	Methuen	Aug. 3, 1864	65
1851	Keenan, Thomas	S. Lynnfield	Jan. 17, 1865	61
1824	Kendall, Peirson T.	Clinton	Jan. 11, 1865	72
1852	King, Dan.	Greenville, R.I.	Nov. 13, 1864	72
1832	Merriam, Royal A.	Topsfield	Nov. 13, 1864	80
1836	*Mott, Valentine.	New York	April 26, 1865	80
1833	Odin, John	Boston		55
1845	Phipps, James M.	Boston.	Feb. 15, 1865	47
1835	Porter, John	Duxbury	March 23, 1865	72
1849	Renton, Peter	Boston.	Feb. 10, 1865	64
1857	Sargent, Lucius M., Jr.	Boston.	Dec. 9, 1864	38
1853	Sawyer, Jeremiah H.	Newburyport	July 4, 1864	44
1836	*Silliman Benjamin.	New Haven, Ct.	Nov. 24, 1864	84
1833	Snow, Asa B.	New York	Oct. 9, 1864	
1812	Swan, Daniel	Medford.	Dec. 5, 1864	84
1818	Walker, William J.	Boston.	April 2, 1865	74
1830	*Spaulding, Matthias.	Amherst, N.H.	May, 1865	92

* *Honorary Members.*

OBITUARIES.

GEORGE BARTLETT.

Dr. George Bartlett was born at Plymouth; graduated at Harvard College in 1827; and at once entered on the study of Medicine. Possessed by nature of a vigorous frame, rendered still more firm by active habits of life, he had scarcely known a day's illness, until a few months previous to his decease. He died of Bright's disease, Sept. 24, 1864, in the 58th year of his age.

Dr. Bartlett had been Assistant as well as Student during the years of his medical pupilage, and was greeted in his neighborhood as physician, long before the reception of his degree. Consequently, escaping the long years of "waiting for business," that are so trying to most of us, he entered at once into a comparatively large practice, and steadily increased it until the last year of his life. His devotion to his patients was so great, that he scarcely ever left the city for a week at a time, probably not twice, for the last thirty years.

He had a thorough knowledge of materia medica; was a careful observer of all new remedies, and tested them as fully as could any one, who was a cautious practitioner. Not the least desirable qualification, self-possession, Dr. Bartlett had in an eminent degree; so much so, that in the absence of any remedy, medical or surgical, ordinarily in use, he could at once suggest some useful substitute.

He was the soul of courtesy towards his professional brethren, and no one ever knew him to magnify his office in professional intercourse. It was with him an invariable rule, never afterwards to attend a patient he had once seen in consultation, lest it should rob the attending physician of a patient. So far did his sense of propriety carry him, that he invariably preferred some new adviser should take charge of the case, rather than that he should be in any way the means of dislodging the first practitioner.

Thus, with large experience, assiduous attention, and entire self-possession, he obtained the esteem and affection of his patients, in a degree not always reached by practitioners of the healing art.

F. H. G.

JOEL HENRY BROWN.

Dr. Joel Henry Brown died at West Newton, March 19, 1865, in the fifty-third year of his age, terminating an active and laborious life by a short and distressing illness. His disease was œdema of the glottis.

He was born in Bradford, N. H., Oct. 22, 1812. He passed his entire minority on his father's farm; and it was not until he had attained the age of twenty-one that he entered upon a systematic course of study which prepared him for Dartmouth College, from which institution he graduated in 1841. For several years after leaving college he divided his time between the duties of school-teaching and the study of his profession. He commenced the study of medicine in Hanover, N. H.; continued it in Boston, where he held a position in one of the public schools, and finally, in 1846, received the degree of M.D. from his Alma Mater, upon whose catalogue his name appears as Joel Brown; the middle name of Henry having been assumed at a later period in Boston, from motives of convenience.

He established himself at Weymouth Landing in 1847, and remained there until he removed to West Newton, in January, 1848.

Dr. Brown, though of large stature and robust appearance, was unfortunate in the matter of his health, the temporary failure of which repeatedly interrupted his professional labors, and once at least seriously threatened his life. He possessed an unusually well-balanced character, combining marked decision and energy with great discretion and caution. A complete self-control preserved for him a perfect equanimity, prevented all impulse and excitement of expression, and rendered his manner uniformly dignified, gentle and courteous.

As a practitioner his success was unquestionable. During a great portion of his professional life, he was the only physician in a large community which not only received him unanimously, but eagerly sought his services. He thoroughly loved his profession; he firmly believed in its worth and utility, was jealous of its good name, and prompt to defend it against all abuse and derogation. A. H.

S. FAYETTE CLAPP.

Dr. S. Fayette Clapp was born in Chesterfield, Mass. He was a graduate of Brown University, R. I. He completed his studies with Dr. Sylvanus Clapp, of Pawtucket, R. I., and Dr. David Rice, of Leverett, Mass. He became a member of the Massachusetts Medical Society in 1854, and removed to St. Louis. He was very eminent as a surgeon, performing the most difficult and heroic operations with great

skill. When our civil war broke out, he had many very tempting offers to join the rebel service in the capacity of a surgeon, but he stoutly refused all such inducements, and joined the Union cause, was made a Brigade Surgeon, and served finally in the Mississippi Gunboat Squadron, before Vicksburg. While in the Union service, his family were robbed of all their property, and endured many hardships and privations. While on the gunboat he contracted disease of the lungs, which ended in pulmonary phthisis, of which he finally died in Lee Centre, Illinois, in the autumn of 1864. D. H.

LUTHER METCALF HARRIS.

Dr. Luther Metcalf Harris died at Jamaica Plain, January 28, 1865. He was 75 years old, having been born May 7, 1789, at Brookline.

Dr. Harris graduated at Brown University in 1811. He "heard Dr. William Ingalls's two courses on Anatomy," and read medicine three years with the distinguished Le Baron, of Roxbury, and in 1814 he was appointed a surgeon in the army, and stationed at Fort Independence.

He settled in practice at Orford, N. H., in 1815; but after five years returned to the homestead. In 1823, he joined the Massachusetts Medical Society, and removed to the village of Jamaica Plain. Here he passed his life, having the field alone for twenty years. He was held in affectionate regard by a wide circle of patients and excellent friends, a good share of whom never sought other aid, till he could no longer give counsel and sympathy. As a practitioner, he was wise, studious, genial and full of kindness; yet very cautious, and not inclined to estimate his own abilities highly enough, especially in difficult cases.

Dr. Harris was a man of the strictest morals; a pure and high-minded citizen, giving his approbation and aid to every good cause. In the parish and in the town, he was justly esteemed. His hours at home were given to books and music. English literature, and history, he read constantly. "An edition of Shakspeare," he says, "was published and came into my hands when a boy of fifteen;" and that author was hardly out of his hands till they were done with books.

Proofs of his extensive reading and his wit occasionally appeared, but it was seldom; for he had no boldness of character; and, in truth, an extreme sensitiveness—almost timidity—held sway over him.

He delighted in music. He understood and felt all its fascinations. But here, too, he never uttered what he knew, except to a very few kindred spirits.

In 1847, failing health compelled him to relinquish his business to

a partner. But the years of increasing infirmity were busily occupied; and, in 1861, he printed the genealogical history of "The Emigrant Robert Harris and his Descendants."

But Dr. Harris was really best known and appreciated in the bosom of his family, where he was the centre of overy joy and every sorrow, and where he died, surrounded by the wife of his youth, and those who are happy in the inheritance of his virtues and his refined tastes.

G. F.

J. LAWRENCE FOX.

Dr. J. Lawrence Fox was born in Salem, January 11, 1811, and died in Roxbury, December 17, 1864. He was son of Ebenezer Fox, of Hollis, N. H. He prepared for College at the Public Latin School in Salem. He was graduated at Amherst in 1831. He studied medicine at Salem, with Dr. Abel L. Peirson, and at Philadelphia, and received his medical degree from Harvard, 1835. September 6, 1837, he was appointed Assist. Surgeon in the United States Navy. He was with Capt. Wilkes in his southern expedition, where Dr. Fox's services were highly appreciated. He was appointed Surgeon U. S. N., in 1847. June 15th, of the same year, he married Elizabeth A., daughter of Commodore Charles Morris. During 27 years he was in constant service, much of the time on important posts. For many years, on two different occasions, he was stationed at Chelsea, much to the satisfaction of the Profession of Boston, at whose Societies he was always a most welcome visitor. His urbanity, his intelligence, and his wide experience, combined with his rare modesty and unblemished honor, always gave pleasure and afforded profit to his associates. There was a certain dignity about him which suited well his fine manly form.

Early in 1864, he was appointed Fleet Surgeon of the North Atlantic Blockading Squadron, under Commodore Porter, then near Fortress Monroe. His labors in this position were very arduous, and a trouble in the heart that had probably been insidiously encroaching upon him for some time, increased fearfully. Yet he still kept at his post, even when unable, owing to dyspnœa, to lie down at night, and great œdema of the legs had supervened.

It was only at the urgent solicitation of his brother, and of other medical men, that he took a leave of absence for a few weeks, vainly hoping to be able to return again after a short rest at home in the North. He soon found, however, that his final illness had come. But his cheerful patience under suffering, and his resignation under this loss of his brightest hopes of serving his country in the hour of her need, were charming to all who saw him. No one entered his sick room without feeling the friendly influences that seemed to radiate from him.

He was as truly a martyr to this sacred war as is the soldier who falls dead upon the battle-field. His memory will be to some of us a perpetual benediction. His wife and three children, who still live, will gain from it some of their highest consolations. H. I. B.

LUCIUS M. SARGENT, JR.

DR. LUCIUS M. SARGENT, Jr., Lt. Col. 1st Mass. Cavalry, was killed, Dec. 9th, 1864, in action, near Bellfield, Va., by a shell which broke the right clavicle and otherwise crushed in the chest, though leaving no noticeable external disfigurement.

Dr. Sargent was born in Boston, Sept. 15th, 1826. His life, not a long one, was unusually varied and full of incident. At school, college, before the mast, as artist, physician, or soldier, he was always among the foremost where expedient, energy, talent, and courage were necessary for success. He had seen much of the world, and knew well both books and men. To whatever he undertook, he gave his whole energy with characteristic devotion. Few of his age were his equals in wit, literature, or science. To great physical strength he added the most delicate touch with the pencil, and the tenderest manipulation of the sick.

After his marriage, in 1847, he fitted up a studio at his residence, and passed much of his time in drawing, painting, and collateral studies. Art-anatomy naturally led to practical anatomy, and thence to medical science in general. Having decided to enter the profession, he made the business of preparation a no half-way matter. His zeal was unbounded and his application unremitted. Nothing was too trivial to escape his rapid observation, nor too difficult to discourage his ardent enthusiasm. His progress was remarkable, and the position he attained unprecedented—so that when he graduated he was already a man of mark, to whom the profession looked in full expectation of greater things in after days. The Hospital created the office of Artist to secure his services; and the Boston Society for Medical Improvement, at the earliest moment allowed by their constitution, elected him a member. He soon became one of the most prominent physicians of the section of the city where he located; and a brilliant future seemed opening before him. But the chief obstacle to his medical career came from a source the last to be suspected by any one not intimately acquainted with his character—extreme tenderheartedness. Fearless of gods and men, the plaintive weakness of a sick child appalled, and its death while under his care completely unnerved him. It was while weighed down by an experience of this kind that he obtained the appointment of Surgeon of a three years' reg't, 2d Mass.

Vols.; hoping that the duties of the service would be more tolerable. But the routine of winter quarters and the surgeon's call, with its array of malingerers, soon became too dull for his irrepressible energies. He accordingly resigned his medical commission, asked for a position in the cavalry, and was appointed Capt. in the 1st Mass. Regt. Subsequently he was in a multitude of skirmishes and actions, and dangerous movements known only to cavalry service; and he rose in course with meritorious conduct to the rank of Lt. Colonel.

At the successful action of Aldie Pass he was wounded in the chest, and left for dead on the field; but the ball fortunately made only a subcutaneous circuit of nearly one third the chest, and he soon recovered to return at once to his command. In his last action he fell at the end of a successful charge, at the head of his column, sword in hand, at the very moment of victory.

Strong-handed yet tender-hearted—impulsive yet tenacious of purpose—utterly without fear yet watchfully cautious—gallantly daring in assault yet undauntedly courageous in deadliest combat—of none of the patriot heroes who have nobly perished in unselfish efforts to save their perilled country are the poet's words more *literally* true:—

> "With knitted brow and lifted blade
> In Glory's arms they fall."

B. E. C.

WILLIAM JOHNSON WALKER.

Dr. William Johnson Walker died at Newport, R. I., April 2d, 1865. His father, Major Timothy Walker, and his mother, Abigail Johnson, were born in Burlington, Mass., and lived in Charlestown, Mass., where William Johnson, the second child of a large family, was born, March 15, 1789. His early education was in the public schools of his native town. He was fitted for College at Phillips' Academy, Andover, and entered Harvard University, where he was graduated in due course, in 1810. Although he was admitted to be a young man of ability, he, as he often regretfully confessed, did not devote himself as he ought to his College duties. The branches in which he was most interested were latin and geometry, in both of which he continued to take great pleasure through life.

He commenced the study of medicine in Charlestown, and subsequently continued it in Medford, Mass., under the direction of John Brooks, M.D., afterwards Governor of the Commonwealth, for whom, as his medical instructor, he always expressed the profoundest regard. The study of his profession was perfectly congenial to his taste, and he pursued it, especially the branches of anatomy and physiology, with

great industry and success. While yet a student, he competed successfully for the prize on the subject of Hydrocephalus offered by the Boylston Medical Committee of Harvard University in 1813. He was graduated at the Massachusetts Medical College in 1813, and soon after war at the time existing between the United States and Great Britain, sailed for France in a privateer fitted out from Boston against the English commerce. In Paris he devoted himself assiduously to his profession. The number of the French students being greatly diminished by the conscriptions of Napoleon, the hospitals were mainly served by medical students from abroad. Of the unusual opportunities thus offered, Dr. Walker, in company with the late eminent professor of Clinical Surgery in Harvard University, Dr. George Hayward, availed himself most faithfully, under the instruction of such men as Boyer, Roux, Dupuytren, Corvisart, Dubois and Magendie. On the abdication of Napoleon and the cessation of hostilities after the battle of Leipzic, Dr. Walker went to London and became a pupil of Sir Astley Cooper. He spent six months in the prosecution of his studies in Guy's and St. Thomas's Hospitals, and then returned to the United States. He immediately commenced the practice of his profession in his native town. By his devotion and kindness to his patients, and his consideration of those less favored by fortune, he became beloved and popular; by his knowledge of his profession, by the readiness and clearness with which he communicated that knowledge to his juniors, his affable manners towards them and his scrupulous care of their reputation, he became with them a favorite consulting physician and surgeon. The older members of the profession, though they did not always find him as agreeable in the consultation-room as they might wish, could never deny the accuracy of his observations nor the acuteness of his diagnosis. He was appointed physician and surgeon of the Massachusetts State Prison, which office he held for several years, and also consulting surgeon to the Massachusetts General Hospital. After having practised his profession about thirty years, and having performed successfully nearly all the capital operations in surgery, he relinquished it and went to Boston. He there turned his attention to the various public improvements in progress, especially in manufactures and railroads. The mental qualities which had made him eminent in his profession did not fail him in his new walk, and he soon amassed a large fortune. But it was no sooner acquired than he set about distributing it. Large sums were given to the Natural History Society of Boston, to Tufts College, to Amherst College, to the Institute of Technology in Boston, and to Williams College, amounting in all to about $200,000. This was given during his lifetime; by his will the four first named institutions are his residuary legatees, and thus become the recipients of a further sum of more than $800,000. Dr. Walker himself had not a

little experience as a medical instructor, and was eminently successful; probably no physician in the State, not connected with one of the medical schools, had received into his office so many pupils.

Like most men of strong intellect, he was pretty decided. After having formed an opinion upon mature consideration he was seldom moved, and was sometimes harsh in maintaining it. No man was ever a truer friend, and those whom he considered his enemies were never in doubt as to his relations to them. His temperament was ardent, which sometimes betrayed him into a course of action in which there was much to regret and little to defend. He enjoyed humor, and possessed a dry and pleasant wit. Ten years before his death he suffered from saccharine diabetes; he one day remarked, "how have I been maligned; my brethren in the profession have some of them denounced me as a sour, crabbed old fellow, and here is their refutation, for I am melting into honey-dew."

Dr. Walker owed his professional success to his accurate knowledge of anatomy, his clear conception of the principles of physiology, and his careful study of the natural history of disease. He believed in the principle embodied in the motto of our Society, but he also believed that Nature is a true leader to the diligent and vigilant only; to those who search out her secrets and watch for her monitions. Although in the main he was a cautious, he was never a timid, practitioner. He was by no means wanting in boldness and decision when occasion required.

Dr. Walker married, in 1817, Eliza Hurd, daughter of Joseph Hurd, of Charlestown, by whom he had eight children. His widow and five of his children survive him. M. W.

ARTICLE VI.

THE MEDICAL PROFESSION AND SOCIETY.

BY GEORGE C. SHATTUCK, M.D.
OF BOSTON.

READ AT THE ANNUAL MEETING, MAY 30, 1866.*

MR. PRESIDENT, AND FELLOWS
OF THE MASSACHUSETTS MEDICAL SOCIETY:

WE meet, on this our anniversary, to hold counsel on matters of interest and great importance, not to ourselves only, by any means, but to all members of the community. Accidental violence, sickness, death, are impending over all; no one knows how soon or how suddenly he may be overtaken by them. The strongest may not wisely glory in his strength and despise means and appliances of support, relief or cure. The agents of disease, decay and death beset the path of all in every period of existence. The fœtus in the womb, and the old man in his last struggle to maintain existence, are alike the subjects of our care. Strong and weak, rich and poor, high and low, have a concern in our doings and sayings

* At an Adjourned Meeting of the Mass. Medical Society, held Oct. 3, 1860, it was

Resolved, "That the Massachusetts Medical Society hereby declares that it does not consider itself as having endorsed or censured the opinions in former published Annual Discourses, nor will it hold itself responsible for any opinions or sentiments advanced in any future similar discourses."

Resolved, "That the Committee on Publication be directed to print a statement to that effect at the commencement of each Annual Discourse which may hereafter be published."

as we meet here to-day, in the furtherance of the interests of the science and the art intrusted to our charge. Our responsibilities are great, and each one of us in his solitary round, as well as at these times of reunion for counsel and refreshment, must realize more or less vividly the arduousness and difficulties of his calling, as well as his need of support and encouragement.

We have this year appropriated more time to the objects which bring us together. Scientific papers and communications are encouraged by an assurance that they will not be crowded out by matters of business and routine. There is no longer one address or one speaker, in which and by whom such subjects are presented. Hours have been assigned for written communications on matters pertaining to our science and our art, and hence your attention may now with propriety be invited to some thoughts on our professional duties and relations, the subject of the annual address nineteen years ago, by one beloved and esteemed in his day, whom the present speaker must be content to follow here as elsewhere, at an humble distance.

One of our trials is that of intercourse with many who, from ignorance or wilfulness, despise our profession and treat it with disrespect and insult. We are living in an age and a community where authority is misunderstood and set at nought, where the individual feels himself called upon to treat lightly the conclusions and experience of the past, and to investigate and decide anew on most important questions and interests. Why should there be pro-

fessions and societies to trammel and fetter the individual, to rob him of his liberty, and to clog and impede his efforts and aspirations? We have amongst us a sect of eclectics who are banded together to resist the profession of medicine with its colleges and societies, and to claim for each individual the right to follow his own fancies and notions, untrammelled by a regard to the rights, feelings, or interests of any associates. Our profession has existed for two thousand years, and each age has borne testimony to its efficaciousness and its value; but all this is of no account with those who prefer medical practitioners for the very reason that they do not belong to a profession. We have others among us who claim that in all this time, from absurd prejudice, the female sex has been deprived of a just right to support themselves and their husbands and children by the exercise of the art of healing. The community has been called upon to furnish means for the erection of medical colleges and hospitals, that the science and practice of medicine may be taught to women.

It is urged upon medical societies to admit amongst their members the graduates of these institutions, and complaint is made to the State legislature that the diplomas of these colleges do not command proper respect and consideration, and that male and female practitioners are not regarded nor treated with equal respect or confidence. All facilities must be granted to prove to the world that it has been all along doing great injustice to the female sex, with the idea that the organization of this sex, its physi-

cal, mental, and moral peculiarities, are not as well adapted to the acquisition of the science, and to the practice of the art of medicine, as are those of the other sex.

The fallacies that the great Creator has made all alike, and not each after its kind; that welfare and happiness are to result from the removal of all law and restraint, and every one being allowed to do what seemeth good in his own eyes; that the individual cannot trust in the solution of problems worked out in past ages, nor in any divine ordering of the world; and that his duty is to set about reforming and reconstructing every thing, are not to be reasoned out of people, inasmuch as their very entertainment must proceed from an original defect of reason and judgment. They may remind us of our own defects, of the saying, *humanum est errare;* they may stimulate us to self-examination, and to such amendment and improvement that a good cause shall not suffer from our weakness or negligence. The fact that there are those who have no confidence in our profession, who seek relief in pain and sickness from other sources, should lead us to ask how far we are to blame for all this, what are our shortcomings and faults, and how we are to amend them? Controversy for the most part is unprofitable and to be avoided, and if we take ourselves to task we may be let alone by others. And we have an additional motive for this, when we consider what a glorious heritage is ours. We belong to a body which for more than two thousand years has been doing a work of beneficence through earnest and diligent seeking of the

truth, which has existed in such various climes and countries, and has lived through the rise and fall of mighty empires and of powerful dynasties. We are associated with great and good men of all ages, whose writings are identified with the literature of the most polished languages, and their deeds with the histories of the mightiest nations. And whatever we may do in our short lives, will not die with us. We are indeed the children of a day; as individuals our strength is uncertain, so disproportionate to the work, yet each of us may do something towards increasing the store of knowledge, to be used by those who come after him. Each one may sow seed, leaving the reaping for others, so that when the places in which he has labored and with which he has been identified, shall know him no more forever, the world may be the better for his having lived in it, and succeeding generations wiser and happier for contributions, however small, preserved in the archives of the profession which lives and flourishes, whilst its individual members die and disappear. Can we not then spend our hours profitably in looking at and considering some of the objects and advantages, some of the privileges and duties pertaining to each of us as members of the medical profession and the medical society. There is, it is true, nothing new to be said on this subject, but old truths may be revived and dwelt upon, and we may inquire of the days that are past, and we may consider the sayings and doings of our fathers in such a way as to take hold of our own work more understandingly and to prosecute it more vigorously.

The reasons for association in a profession and a society lie deep in our very natures. A practitioner in a part of our State where the population was sparse, was summoned from his bed on a cold stormy night of the month of December, and went for miles on horseback through cold and snow, to a patient of means and substance, who had been suffering for hours with retention of urine. Gently, promptly and efficaciously was the relief administered. As the physician was preparing to return, the patient asked, What compensation shall I make? and was told that the fee would be left to his own judgment and generosity. A well filled purse was put into his hands, and from its contents a pistareen taken, for those were the days of specie payments and Spanish coins, and when this was placed in the Doctor's hand, he kept it for a while on his palm, and as he turned it over, exclaimed, What a poor creature is man when left to himself!

Our brother was a philosopher, and took refuge in his disappointment in the contemplation of a truth, which is at the foundation of and connected with all social organization, and which, in these days of individualism, may be pondered with advantage. What would man be, what would be his position and his attainments, without the family, the State and the Church? How wonderfully are his faculties developed and strengthened by institutions which put him in relations and enable him to work in co-operation with his fellows! What wonderful bodies were those guilds which sprung into existence in the dark ages, at a period when all of man's energy and wisdom were

needed for advancement and protection! Who has not gazed with admiration at the guild houses, or at the engravings and photographs of them? Who has not admired the schools, hospitals and alms-houses which were thus called into existence? Each trade had its guild or association for mutual improvement in their respective arts and sciences. The strong and the weak, the high and the low, the rich and the poor, were bound together for mutual support and edification. The weakness and infirmities of man's intellectual and moral nature were acknowledged, and means taken to improve and exalt them. If we inquire what was doing for our own profession in our mother land, and about measures taken to improve it, we find an act of Parliament passed in the third year of the reign of King Henry VIII., in the year 1512, in which it is recited, "Forasmuch as the science and cunning of physic and surgery (to the perfect knowledge whereof be requisite, both great learning and ripe experience) is daily, within this realm, exercised by a great number of ignorant persons, of whom the greater part have no manner of insight in the same, nor in any other kind of learning, smiths, weavers and women boldly and accustomably taking upon themselves great cures and things of great difficulty, in the which they partly use sorcery and witchcraft, partly apply such medicines unto the disease as be very noisome, and nothing meet therefore, to the high displeasure of God, great infamy to the faculty, and the grievous hurt, damage and destruction of many of the king's liege people, more especially of them that cannot discern

the uncunning from the cunning" — "Therefore, no person within the city of London, nor within seven miles of the same, shall take upon him to exercise and occupy as a physician or surgeon, except he be first examined, approved and admitted by the Bishop of London or the Dean of St. Paul's for the time being, calling to him or them four doctors of physick."

In this recital are many points worthy of notice. The connection of medicine and theology, as shown by physicians being placed under the supervision of church rulers, may first engage our attention. This provision was wisely abrogated in the course of a very few years, and the College of Physicians became an independent body, charged with duties and responsibilities in the supervision of the practice of medicine; yet the truths at the bottom of the connection still remain, and are not enough heeded in our day. The leading motive of establishing the College was to prevent and remedy abuses, which were to the high displeasure of God; and would it not be well for us if such a motive were more active in our day and generation? Are we not wanting in a realization that our thoughts and works, both as individuals and members of societies, should be, not so much in reference to our own advancement as to the glory of our Maker and Redeemer? Do we sufficiently realize the presence of an omniscient God, constantly watching over his creatures, recognizing and compassionating their infirmities, especially interested in all attempts to succor and relieve the erring and unfortunate, and noting in his book of remem-

brance every kind and disinterested look, word and deed?

The founder of our Holy religion came to this world healing the sick, leaving us an example of ministering to the diseased and infirm; and would we not respect our calling more, and do its work better, were we animated by the conviction of an association with that Divine Master, at whose command the blind saw, the deaf heard, the lame walked, and even the dead came to life? Would we not be more tender and faithful to our patients — would we not be more gentle, courteous and disinterested in our intercourse with each other, did we realize that this high displeasure of God, mentioned in this act of Parliament, is that most to be dreaded and most to be avoided by us, even in the minutest and apparently most insignificant actions of our lives? We cannot, indeed, boast of being exempt from the troubles and dangers of superstition. The Mesmerist and Spiritualist practitioners in our own community should remind us that our natures are as in times past. Are we not, however, more in danger of skepticism? In our hurried and bustling lives, with the claims of so many sciences and departments of knowledge appertaining exclusively to this world and this life, so pressing upon us, are we not chiefly in danger of neglecting the unseen and the eternal, and of shaping our course and directing our studies solely with reference to a world and a life abounding in sin and infirmity, and which can never satisfy either our intellectual or our moral nature? Busied as we are with man's littlenesses and infir-

mities, do we not especially need to be looking forward and upward? Compelled as we often are to recognize our own ignorance and insufficiency, ought we not to be seeking a light and a strength which is supernatural? Is theology, or a knowledge of God, safely to be disregarded by any of us, or can we wisely carry on a work and a conversation with which God and Heaven have nothing to do?

But we must note, also, in this act of the High Court of Parliament, recognizing our profession and setting forth its duties, that the grievous hurt, damage and destruction of the people is dwelt upon as an evil, when every man or woman is allowed, publicly, to exercise the art of healing, which is to be remedied by legislative enactment. In the original act of incorporation of our own Society, the same truth is brought forward: "Whereas it is clearly of importance that a just discrimination should be made between such as are duly educated and properly qualified for the duties of their profession, and those who may ignorantly and wickedly administer medicine, whereby the health and lives of many valuable individuals may be endangered, or perhaps lost to the community." Thus we have declarations from two legislative bodies, one convened in London, and one in Boston, the second made after an interval of two hundred years, recognizing the fact that medical societies were formed for the *great benefit* of the community. And certainly we can safely point to our records of doings and writings for proofs that these objects have not been lost sight of. How many histories of diseases and

epidemics have been preserved, how many a one has returned to his work edified and strengthened by consultation with his brethren! We need not stop to prove that this part of the work of medical societies has been vigorously and successfully prosecuted. There is, however, another matter specified as of great importance, namely — that of securing a community against ignorant and incompetent practitioners, into the prosecution of which it is well for us to inquire. The early records of the Royal College of Physicians have been destroyed. In the year 1555, John Cains was elected its President, and held the office for seven successive years; and remarkable for many qualities and many doings, he was distinguished for the energy of his administration as executive officer of the College. We read of his admonishing, fining and imprisoning many empirics, and of his addressing an appeal to justices, mayors, sheriffs, bailiffs, constables and others, exhorting them to commit to prison offenders against the College laws, "men who were wandering about the country with changeable names and false medicines, to the great abuse and deceit of the king's people, and loss of goods and lyves of the same." In the year 1555, Cains issued a letter under the corporate seal, reproving the University of Oxford for having conferred on Simon de Ludford, a seller of drugs, and David Lawton, a coppersmith, the degree of bachelor of medicine, both having been rejected by the censors of the College. The effect of the letter was that the Chancellor of the University ordered that, in future, candidates for a medical degree should be examined in

Plato and Aristotle in philosophy, and in Hippocrates and Galen in medicine.

Our own Society has certainly constantly exercised an influence to secure time and amount of preparation in those entering the profession. Within a few years only, when Harvard University established a medical commencement at the close of the lecture term, and a practice was introduced of conferring the degree of Doctor in Medicine on bachelors of arts who had attended lectures on Anatomy and Chemistry, and whose term of professional study lacked four months of three full years, members of this Society remonstrated at any one, however superior his preliminary education and accomplishments, becoming a Doctor in Medicine without having devoted at least three years to professional study; and the practice was at once abandoned. The experience of all societies in this age, leads to the conclusion that the improvement of members and the securing good education to candidates for membership, are what can, with most certainty, be accomplished. In our own country the government makes no provision for repressing quackery, and delegates no powers to any societies for this purpose. The free and enlightened citizen must take care of himself, and is allowed every facility for trying any systems or nostrums to improve his health or cure his disease.

In the history of the Royal College of Physicians of England, we read of various other attempts to prosecute and punish, by fine and imprisonment, those undertaking to practise medicine or surgery without

a license or degree. In the reign of Queen Elizabeth, a letter was sent to the College by the Secretary of State, signifying that it was Her Majesty's pleasure that one Margaret Foenix, a poor woman, should be permitted quietly to practise her small talent, and minister to the curing of diseases and wounds, by means of certain simples, in the application whereof it was thought an especial knowledge had been given her for the benefit of the poorer sort, and chiefly for the better maintenance of her impotent husband. To this letter, answer was made by the College, "that the especial knowledge referred to was a weakness and insufficiency, rather to be pitied of all than envied of them, or maintained by others; and that, as there ought to be no one thing more allowable in his honor's eyes than the preservation of wholesome laws, and the maintenance of good and laudable orders, but, also, the greatest ornament and beauty of a commonwealth; they were of opinion that the diligent care they had, and were bound to have, over the life and health of Her Majesty's subjects, the dutiful regard they bore to the maintenance of their privileges, and the strait band of oath and conscience, were of greater weight than they could release themselves of at pleasure: and, therefore, most respectfully refused to suffer either her or any other unqualified persons to intrude themselves into so great and dangerous a vocation, not only against good order, privilege and conscience, but, also, to the evident danger of the life and health of such of Her Majesty's most loving subjects as might be abused by their notorious and wil-

ful ignorance." Yet, vigorous and successful as were these efforts, quackery was not abolished. Queen Elizabeth herself sought no counsel of the members of the Royal College in a serious illness, but trusted to a Spanish Jew, from whose poison she narrowly escaped. Edward VI. was a victim to an ignorant woman, in whose care he was placed by the Duke of Northumberland, who dismissed his physicians. And we have no need to ransack the records of the past for instances in which those of social position and education, as well as the vulgar and illiterate, prefer the services of boastful empirics to those of the modest and quiet physician.

We must then recognize this truth, that our government refuses to take cognizance of these matters.

Our President has no power to call on mayors, bailiffs, constables or police officers, to banish and imprison those seeking to impose on the community with offers to prevent or cure disease. Not only has every man in this community a right and a liberty to intrust his health to the ignorant and unprincipled, without let or hindrance from law or statute, but the empiric can call upon courts and officers to enforce his claims to compensation, and he finds readily, in the newspaper and magazine, the opportunity to make known his pretensions and to set forth his claims.

The question is not before us whether the community is better off for this removal of all impediments, for this granting of facilities to the practice of the art of healing by the ignorant and presumptuous.

Accepting the fact, we must devote all our energies to our own improvement in skill and knowledge, and to maintain our own discipline, that the unworthy and incompetent may not belong to our Society. We surely have enough to do in improving and reforming ourselves. We must not conceal from ourselves the imperfections and deficiencies of our science and art, we may properly admit them to others without blazoning them abroad. What Hippocrates announced more than two thousand years ago, is still true, "Life is short, and the art long, the occasion fleeting, experience fallacious, and judgment difficult." What Lord Bacon says of idols of the tribe and idols of the den, idols of the forum and idols of the theatre, needs still to be studied and pondered over.

Surely we may wisely consider what is said in the extract from Rousseau, which Louis, to whom we owe so much in the advancement of medical science, adopted as the motto of his work on Typhoid Fever, "Truth is not in my mind, but in external things; the less I put of myself in my judgments, the nearer I shall get to the truth." How much has this "self" done to mislead and to delay the progress towards truth! We must indeed admit that whilst the science and art of medicine have been cultivated for more than two thousand years, they are still imperfect. We meet here to-day for improvement, and the questions why and whence these imperfections are very pertinent.

The English and the French philosophers call our attention to causes in our very nature and constitution, which we must bear in mind ourselves, and which

we must point out to any who honestly ask a solution of doubts insinuated and instilled by the opponents of our profession. And these difficulties are from intellectual and moral defects, which are so inherent in our nature that we never can expect perfection for our science and art. No one can deny or doubt that we have made and are making great advances, but the horizon opens before us as we go on, and the extent of the field becomes even more apparent than our progress. The importance of a knowledge of the secretions and excretions has always been insisted on by writers and teachers. The empiric has boasted how much he can find out of the nature and course of a disease by a glance at the urine. How much has chemistry taught us of the composition of the secretions, as well as of the organs and tissues of the human body. We know the elements of the various articles used to build up our frames. We can trace elements going into the system by the stomach or the lungs, and going out of them by the kidneys, the skin or the bowels. But what a problem thus comes before us in each patient! A scientific knowledge of a case involves our ascertaining the capabilities of all the emunctories of the body, and how these organs act under varying circumstances. The kidneys are charged with freeing the economy of effete or superfluous nitrogenous matter, but the lungs, the bowels, the stomach, excrete this same matter, and the proportionate activity of each in each patient is a problem which we can never hope to solve. The counsel of the family physician is much preferred, for he is supposed to know the

constitution and idiosyncrasies of the patient. He may know that some articles of food are more easily assimilated, that such a cathartic is to be preferred to any other, that one emunctory is more weak or more easily deranged, or the art of more readily exciting another. This man is very easily salivated, another is distressed or disturbed by opium, one suffers from exposure to cold, another is never well in hot weather. Empirically we know of one that animal food is more easily assimilated; of another, that he cannot eat mutton. To one, strawberries are poisonous; another has vertigo after eating corned beef. Now the chemical examination of tissues, food and excrement has been carried far enough to show us there must be a reason for this, and to point out in what direction to seek for it. But the practising physician cannot get hold of all the excreta of each patient, and subject them to a chemical analysis so as to formularize the food, the medicine, or the regimen for each case. Whilst we can get hold of the urine for one or another or for several days, yet, varying as this fluid does in connection with varieties of food, temperature, exercise, clothing, moral emotions, how can we expect to subject the whole of this fluid, even passed during one protracted illness, to the chemical and microscopical examination necessary to ascertain definitely the condition and working of the excreting organs? How do the common articles of food—beef, mutton, poultry, milk, wine, beer—vary beyond our power of exact appreciation, and so as not to be recorded in mathematical terms? We cannot appreciate ourselves with perfect exactness, we cannot set

down for the information of others, all the ingesta nor the excreta of the economy. And how many of the mental and moral phenomena which have important influence on the final result, escape us? How much is unknown in the single case of disease; and when we would get general laws from collections of individual cases, how different in certainty and exactness are these results from those of the solution of a mathematical problem! We must admit to ourselves, we must acknowledge to others on proper occasions, the imperfections of our science. And how powerless often is our art to arrest disease and alleviate suffering! Yet these considerations urged against us by those who would do away with our profession, should only stimulate us to a more faithful study of our science, a more careful practice of our art. We have a great task before us in the cultivation of our science, in the advancement of our art, and we need the combined and well regulated harmonious efforts of a great many to carry us on successfully in our undertaking. We have so extensive a field with such minutiæ of detail, that the individual feels painfully his inadequacy to explore and to make them known. And, even, if by the labors of many we must stop far short of perfection, we can attain results of inestimable value to those for whom we labor. The obstacles we have in our natures can thus only, to any degree, be surmounted. The idols of the den of Lord Bacon, the selfishness dwelt upon by Rousseau and Louis, may be hopefully combated by associated labor and efforts. The school and the college are essential to education, and what true professional

man does not recognize that education is the work of every day of the longest life! Michael Angelo was in his eightieth year, the term old master had long been applied to him, when questioned as to his presence amongst and interest in the labors of his predecessors, he exclaimed, "I must still go to school that I may learn." Harvey had made his immortal discovery, had reaped the reward of fame and position and wealth, when he devoted a large portion of his fortune to erecting a building for the College of Physicians, and to the endowment of lectureships; thus emphatically manifesting, at the close of a long, active and successful career, his sense of the great importance of education and improvement to be effected by the advancement of the College of which he had long been a member. It is true that even thus the obstacles and difficulties in the way of progress are often made very prominent. The many laborers come together with such differences of views and results, that ill disposed lookers on will here find matter to urge against our profession. The very last year we listened to a very able exposition of a truth, on which Hippocrates thought it necessary to dwell in his day, and which has been lost sight of and revived repeatedly in the intervening ages. The *vis medicatrix naturæ* should be acknowledged and respected by every practising physician; great evils result from a disregard of this truth; and yet the virtues of drugs and minerals should also be well known and acknowledged. Our brother, who addressed us last year, is known and appreciated by a large circle of friends and patients for his skilful use of the various

articles of the materia medica, but many who read or listened to his eloquent vindication of the restorative powers of nature, to his pungent warnings of the great evils resulting from a deficient appreciation of these curative efforts, and who knew him chiefly from these, naturally believed that he did not recognize the power of art and science to control and shorten disease, to alleviate pain and suffering, to delay a progress to death and destruction.

Six years ago the same subject was brought before us by one who never treats any subject but to instruct and to interest, and of whose achievements in poetry and literature we have reason to be proud; and subsequently it was thought best to pass a resolution that a statement that the Society does not hold itself responsible for any opinions or sentiments advanced in annual discourses, be appended to each published address. And the title of the very last address, "Disease a Part of the Plan of Creation," was startling to many of us who hold to what our Bible tells us of the creation, that God saw everything that he had made and behold it was very good, and who attribute to the Devil and evil spirits, to man's disobedience and the fruit of the forbidden tree, an agency in the introduction and perpetuation of disease, death and all our woes into a world made so fair. Yet, under this title, certain truths are set forth of the limits of human powers in dealing with disease, pestilence and death, about which are mysteries unfathomable to mortal ken; of the Divinity which shapes all our ends, and of our relations to that Being which we all recognize, and which distinguish us widely from

the empiric who pretends to understand and to teach and to be able to do all things. And may we not get an argument to show and prove the objects and benefits of our profession and our Society, from the apprehensions and criticisms provoked by our annual addresses?

We come together here differing much in the faculties bestowed by nature, in the opportunities of education and observation enjoyed by each one. Each one of us singly cannot appropriate nor express all truth. The anniversary orator has but a short hour in which to tell his tale of what he has thought or seen. He must confine himself within narrow limits. He has some truth or some view to which he would call attention, and if he does this impressively and forcibly have we any right to ask more of him? If all saw the same objects, if all looked from the same point of view, why should we come together in a society? And yet so are we constituted, so powerful is self love, that the forcible expression of truths not within our range of vision often annoys and disturbs us. Thus, whilst in a Society like this we may expect a correction of intellectual errors such as Lord Bacon would connect with the idol of the den, we must also look out for moral improvement, and see to it that the self love is mortified which forbids our acknowledgment of truths, and inspires a repugnance to views, seemingly contradictory of our own. Great attention is certainly paid to education in this our day and generation; but are not efforts too exclusively directed to those faculties called intellectual? Is the regulation and

control of passions, appetites, affections, instincts, sufficiently appreciated? The Founder of our holy religion tells us that He is the Truth which is to set us free. He speaks of Himself as the light to which men will not come because their deeds are evil. We do not find scientific records in the Holy Bible. Geology, physiology, pathology are not taught there, and those who look upon the intellect as the only part of man for education and development, who regard the acquisition of knowledge as the one object of the school and the college, despise and neglect a religion whose earliest records tell of the fall of the race, from attempts to know what had not been revealed, and what was not intended to be known; which sets forth mysteries, bids us walk by faith and not by sight, and whose great apostle, versed as he was in all the knowledge of his day, speaks of knowledge as worthless without charity, and sets before us for imitation, and by way of exhortation, no profound study or protracted intellectual strivings, but a diligent labor for years to beat down his body and bring it into subjection. In the records of our science and art, in the lives of its professors and practitioners, what proofs do we not find of abortive attempts to advance science or to cure disease in consequence of selfishness, self love and vain glory! Had a pure love of truth, had a single-hearted desire to cure disease and alleviate suffering, been always the animating motive, had self love and self advancement been always kept in subordination, how much greater would have been our knowledge, how much more highly would our profession have

been appreciated by those to whom it ministers! Did we excel in charity and disinterestedness the ignorant and unscrupulous charlatan as decidedly as we do in skill and in knowledge, would not our superiority be more readily and universally acknowledged? There are those who think that the great advance in our science, the great acquisitions in its domain, are not accompanied by a corresponding appreciation and respect in the community. There are those who say that a larger proportion of the community resort to irregular practitioners than even in the early days of this Society. Whilst our stores of knowledge are increased and increasing, whilst we can recognize and avoid erroneous views and pernicious, unwise, practices of our predecessors, is there not danger of a skepticism and distrust inconsistent with proper activity and perseverance in the use of means of cure? Surely faith and confidence are essential to the successful prosecution of our art, and we cannot inspire our patients with what we have not ourselves. Thus humility, reverence, hope, trust, are virtues to be cultivated in ourselves to the great benefit of our patients, to the commendation of our profession, to the advancement of our science and our art. At the same time I would not depreciate our duties of intellectual cultivation, of storing our minds with knowledge, nor the great advantages of our Society in these respects.

Many of us live where the newest books and journals are not easily had; many of us are so occupied in the practice of the profession, the strength of many is so exhausted by a daily round of visits and

advice, that they cannot learn what is being done or thought by the many laborers in many distant fields. But we all come here for a holiday. Our offices and our patients are left behind. Our hours are uninterrupted, and we can listen to the history of what has been seen, done or heard by others without interruption and with quiet minds. And surely provision is made for increase of knowledge, for intellectual cultivation, in visits to hospitals and museums, in scientific papers and essays, in discussions and conference. Each one of us has something to learn from the others. He who toils in obscurity and retirement comes in contact with those to whom the professional writings, sayings and doings of all the countries of Europe, as well as of our own large cities, are well known; and the city practitioner, with extensive reading and observation, may learn much of the country practitioner, who thinks more deeply and digests more thoroughly amidst scenes of quiet and repose. Both city and country have advantages peculiar to each for the development of certain faculties, for the increase of knowledge, and those living in the one can profit much by intercourse with those living in the other. The idols of the den of the country, the idols of the forum of the city, may both be dethroned with great advantage to those subject to such dominion. And, whilst thus our science and knowledge may be advanced, surely we have an opportunity to practise ourselves in arts, which are very necessary in the exercise of our calling. It is not the clergyman only who is called upon to make himself all things to all men. If we would

cure diseases of the body we must adapt ourselves to the infirmities even of our patients. We must cultivate manners and address to recommend our science, and in intercourse with each other we may be exercising ourselves in ways that will profit us when we deal with our patients. Courtesy of demeanor and gentleness of bearing are requisite to maintain as well as to establish pleasant and profitable relations to professional brethren and patients alike.

There is one other matter to which we can only allude, and by way of bringing more vividly before us the importance of the objects of our Society. We must all deplore the deficiency in education and culture of many entering the profession, and the great difficulty of applying an effectual remedy to what we acknowledge as a great evil. We are citizens of a vast country, but the management of educational interests does not devolve upon the general government. Each of our numerous State legislatures can grant acts of incorporation to individuals associating themselves to teach, examine, and furnish diplomas to medical students, and thus we have a great many medical schools which are not endowed, and are dependent for support upon students. In our community the imperfectly educated easily find patronage and gain a living, and there is a very mistaken idea that preliminary education and culture are not necessary to a successful practitioner. Thus many incompetent and unworthy persons become students and are received as doctors in medicine. At the same time there are many with natural aptness, and desirous of education, who cannot pay for it. Many who

need medical advice cannot make any pecuniary compensation, and in this country medical men and medical professors must supply these wants. The reasons are sufficiently obvious, why, in many of the most enlightened countries, medical students are educated by the government, and not allowed to practise medicine till after having profited by advantages in able and learned professors, well furnished museums and libraries, large and well appointed hospitals, till having spent several years in these studies and passed through several examinations. Recognizing thus the evils in deficient education and culture, the medical societies have a greater responsibility in imposing terms of admission to their ranks, and in supplying means of culture and improvement. Medical teachers have their infirmities and imperfections, but they are not responsible for these evils to the degree in which they are blamed. They should have the credit of trying to prevent and diminish them. It is only exceptionably that they secure a pecuniary compensation proportionate to their labors. They must contribute liberally to medical education, and their offices are to be held only as involving a competition calling out the exercise of all their faculties and making large demands on time and strength. In comparison with the old countries of Europe ours is still new, and much must be done to place our higher educational institutions entirely on a level with those of the large cities of England, France and Germany. Their ample endowments by the government securing an entire independence of students, the regulations and laws enforced by competent authority, both on those belonging to the profession and those wishing

to enter it, are advantages which we must acknowledge and earnestly desire to have. Whilst in our community we can boast of a system of common schools wisely and liberally provided, our legislature has given nothing to medical schools, at the same time that it has contributed liberally to foster and support a female medical college. Private munificence is the only source of the scanty endowment of medical colleges; and with just pride may we refer to a physician, to Dr. Ezekiel Hersey, as the first to call attention to the necessity and importance of such endowments. Several years elapsed after his legacy was received by Harvard College, and the words and example were unheeded, till Dr. John Warren, by his personal exertions and influence, started the medical department of Harvard University.

Medical education is very expensive. Hospitals, museums and libraries, are costly. The number of sciences connected with medicine involves the necessity of a large corps of professors. The scholarships and fellowships of the old world by which years can be devoted to study and scientific pursuits, with exemption from the cares of life, are beginning to be appreciated here, and we may hope that means for establishing them will be supplied. The resources of medical schools are being largely increased, and by members of the profession. The late Dr. John C. Warren labored at establishing and increasing a museum, and has provided means to go on with the work. Citizens of Boston have lately contributed to remove the debt incurred in erecting the present Massachusetts Medical College, and, as this is being outgrown by the school, may we not

hope that those will be found appreciating the importance of a high and extended medical education, who will contribute liberally to supply the necessary appurtenances. The fact that members of this Society and professors of the College have bestowed, freely, of all they had to such a cause, should stimulate others. The period of three years assigned in this country as the term of medical pupilage is manifestly too short, and in those countries where it is extended to five and six years there is an endowment of the school, so that the student is not taxed for its support. We should note, also, how liberally medical societies in those countries are provided with libraries, museums and lectureships, to carry on the work.

And we should regard the obligation of a life spent in cultivating and developing our faculties, in storing our minds with knowledge, as a compensation for certain disadvantages. Medical men know that the same talents, the same labor devoted to other pursuits, have larger pecuniary rewards, than in their own profession. The merchant, the trader, the manufacturer, are more in the way of accumulating wealth — the politician of securing fame; yet wealth, position, reputation, powerful incentives to activity as they are to those who want them, are snares to the possessor, temptations to ease and self-indulgence. They are to be acquired by the physician only after years of unremitting toil and self-denial, and whilst they fall to the lot of very few, the true satisfaction and delight in training and disciplining the faculties, in establishing a rule and dominion over the appetites and passions, in acquiring knowledge, is the

heritage of all who will strive for it; and we must admit that he who goes on day by day adding to his knowledge by careful observation, developing his faculties of reasoning as well as of perception, freeing himself from the dominion of the idols which would enslave his intellect, and from the demon of selfishness which would blind his eyes and harden his heart, who thus, with increasing years, becomes a wiser and a kindlier as well as a more learned man, has a happier life in obscurity and even amidst toil and suffering, than he who uses his profession simply for self-advancement, and acquires wealth and reputation, which are only of this world and must be left behind when summoned to depart. We begin life with a vivid appreciation of the evils about us, with a spirit and determination to overcome them, and we often err sadly in unauthorized and ill-advised attempts to reform and set right. But as we grow older we become conservative, and we are tempted to acquiesce in what is wrong in ourselves and about us, and regarding our ease and comfort, to cease from a work which can only be accomplished by constant watchfulness over ourselves and unwearied labor. Thus do we need to remind each other that there is a warfare from which there is no discharge; there is a conflict with sin and infirmity from which there is no rest but in the grave.

Usage enjoins upon us each year to call over the names of those departed since the last meeting, and to consider their examples. And if I may be allowed here to refer to one who, sixty years ago, held the important office of Treasurer of this Society, who, during many subsequent

years, did so much to promote its interests in various offices of trust and responsibility, as well as in his daily walk and conversation, and who, lingering amongst us, an object of respect and veneration, has passed the bounds within which the praise of man is of any account, I would speak of him as one whose claims to respect and admiration were won quite as much by an unvarying courtesy and respect to the rights and feelings of others, as by the possession or exercise of what may be strictly called the intellectual faculties. His powers of observation and reasoning, his sound judgment in matters of science and in the ordinary affairs of life, enabled him to be a safe and wise counsellor, and his scrupulous regard to the rights of others inspired a trust and confidence which was never abused. It is hard to realize that his presence at our last anniversary was, probably, his last appearance at any of our meetings. He has been long spared as a beacon light in the path of duty, and he will never be forgotten by those who have looked up to him as their teacher, or walked with him as an associate and a friend.

And of those who, during the year, have actually passed the bourne whence no traveller returns, much might be said to encourage and edify their surviving associates. We are told that the average of life is less in the medical than in other professions; yet, of the eighteen gone from us during the year, one had attained the age of eighty-one years, and one of eighty-five. Both retained the esteem of the community, the love of their profession and a certain degree of activity to the last. The name of Dr.

Green will long be remembered at Worcester, and that of Dr. Thompson at Charlestown. The latter served the community, acceptably, in various offices without neglecting his professional duties; and the same may be said of Dr. Huntington, of Lowell, who was the Lieutenant Governor of the commonwealth for one year, the Mayor of the city where he resided for eight years, an active member of the school committee for several years, and holding other offices of trust and responsibility during a professional life of forty years. He was the President of this Society for two years, and of the District Medical Society for several years. A kind and sympathizing neighbor, he was especially attentive to the poor and needy. Dr. Abraham Gould, of Lynn, died at the same age, on the verge of three score years and ten.

In several of the important and populous towns of our commonwealth, public manifestations of grief and respect have been called out by the death of one of our fellows. At New Bedford, Dr. Lyman Bartlett, beloved and respected by associates and patients, died at the age of fifty-eight. From Boston we miss Dr. Moriarty; from Roxbury, Dr. Charles M. Windship; from Georgetown, Dr. Moody; from Hingham, Dr. Fiske; from Cambridge, Dr. Foster; from Newton Corner, Dr. Bigelow. And testimony comes from all these places of appreciation of the good qualities and faithful services of our brethren who, after longer or shorter periods of service, have passed to their rest and their account.

But, Mr. President, there is a provision of our forefathers which I should be sorry not to notice and respect. An address at a certain hour was appointed,

but the speaker was not trusted to ramble at will; by the assignment of the hour he was reminded that there is a time for all things, that discussions, dissertations and orations, are not addressed to unlimited capacities, and that the very appeal to intellectual and emotional activity must be followed by refreshment and repose. Thus man's complex nature, his mind and his body, were recognized. The doctrine of the correlation of forces was respected, though not known under this name. The laws of the construction and disintegration of tissue were not set forth as they are traced out by the physiologists and chemists of the last few years, nor were the early members of this Society able to scan as closely the processes by which the blood is formed from the food and the tissues from the blood. They knew less than we of the passage of the cholesterine and phosphates, resulting from disintegration of nervous tissue, to the receptacles for their detention before being expelled from the body. But they did recognize a truth which, with all the lights of modern science, was not sufficiently appreciated by some of their successors, who, perhaps, however, would plead that to the arrangement of protracted sessions without a sufficient and comfortable dinner, their poverty and not their will consented. This year, gentlemen, the Committee of Arrangements recognize and provide for all the wants of our nature, and he who addresses you can only conclude with an expression of the hope that he may not have wearied you beyond that point where restoration and repair are attended only by pleasurable sensations.

PROCEEDINGS OF THE COUNCILLORS.

October Meeting, 1860.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held on Wednesday, October 3d, 1860, at 10, A.M., at the Society's Room, No. 12 Temple Place, Boston.

The President in the Chair.

The following Councillors were present: —

Barnstable.
J. Harpur.

Berkshire.
H. H. Childs.

Bristol North.
B. Carpenter,
T. Phelps.

Bristol South.
W. W. Comstock,
W. A. Gordon,
F. Hooper.

Essex North.
M. Root.

Hampden.
T. L. Chapman.

Middlesex North.
J. C. Bartlett,
J. W. Graves,
G. Kimball.

Middlesex East.
A. Chapin,
H. P. Wakefield.

Middlesex South.
L. V. Bell,
J. Hayes,
I. Russell,
M. Wyman.

Norfolk.
E. Jarvis,
B. Mann,
A. LeB. Monroe,
J. Noyes.

Plymouth.
A. Millet,
C. B. Pratt.

Suffolk.
J. Ayer,
G. Bartlett,
H. J. Bigelow,
J. Bigelow,
H. I. Bowditch,
S. Cabot, Jr.
W. E. Coale,
P. M. Crane,
W. J. Dale,
H. Dyer,
J. Flint,
J. B. Forsyth,
C. Gordon,
A. A. Gould,
G. Hayward,
J. Homans,
J. B. S. Jackson,
E. Palmer,
C. G. Putnam,
G. C. Shattuck,
D. H. Storer,
C. E. Ware,
J. Ware,
J. M. Warren,
A. A. Watson.

Worcester.
H. A. Jewett,
E. Lovell,
J. G. Metcalf,
O. Martin.

Dr. Charles E. Ware was chosen Secretary *pro tempore.*

The records of the last meeting were read.

The Committee on Finance, to whom was referred the consideration of the means for liquidating the debt caused by the assumption of the expenses of the several suits brought against Drs. Bell, Carpenter and Storer, by Dr. Ira Barrows, reported the following:

"To appropriate to the purpose, for the term of two or four years, the sums now reverting to the District Societies, about $650 annually."

This proposition was opposed by several Councillors, and various plans were suggested, when on motion of Dr. H. P. Wakefield, of Reading, the following resolution was adopted:

"To appropriate to this purpose such a sum as has, before this time, been appropriated to an annual dinner, to the amount of $600 annually."

In the course of the discussion, Dr. Shattuck called the attention of the Councillors to the fact, that on account of inadvertence, the income of the Shattuck Fund had been used for purposes not contemplated by the testator, or expressed in his will. This sum (about $1000) must therefore be restored to its legitimate use, in order to avoid the forfeiture of the legacy.

The following gentlemen were nominated as candidates for Honorary Membership:

BERNHARD ROESER, M.D., of Athens.
GAETANO VALERJ, M.D., of Rome.

Dr. C. G. Putnam, from the Committee to whom was referred "the Memorial of the American Medical Association on the subject of the increased frequency of criminal abortion," reported,

"That in accordance with the request of the Association, and to promote its objects, the memorial be presented by the Massachusetts Medical Society to the Legislature of Massachusetts."

The report was accepted, and on motion of Dr. Gordon, it was voted that the recommendations be adopted, and that the Corresponding Secretary be requested to present the memorial.

The hour for the adjourned meeting of the Society having arrived, it was voted to adjourn until the close of said meeting.

The Council met according to adjournment. No further business was transacted, and the meeting was dissolved.

CHARLES E. WARE,
Recording Sec. pro tempore.

FEBRUARY MEETING, 1861.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held at the Society's Room, in Temple Place, on Wednesday, February 6th, 1861, at 11 o'clock, A.M.

The President in the Chair.

The following Councillors were present:—

Bristol North.
B. Carpenter.

Essex North.
G. Coggswell,
M. Root.

Essex South.
E. Hunt,
J. M. Nye,
A. Torrey.

Middlesex North.
J. W. Graves,
G. Kimball.

Middlesex South.
J. Bartlett,
J. Hayes,
S. Whitney,
A. C. Webber.

Norfolk.
B. E. Cotting,
C. C. Holmes,
E. Jarvis.

Suffolk.
J. B. Alley,
J. Ayer,
G. Bartlett,
H. J. Bigelow,
J. Bigelow,
H. I. Bowditch,
S. Cabot, Jr.
W. E. Coale,
P. M. Crane,
H. Dyer,
J. B. Forsyth,
A. A. Gould,
G. Hayward,
J. Homans,
J. B. S. Jackson,
J. Jeffries,
C. G. Putnam,
G. C. Shattuck,
C. H. Stedman,
C E. Ware,
J. Ware,
J. M. Warren,
A. A. Watson.

Worcester.
J. G. Metcalf,
O. Martin.

Worcester North.
J. A. Marshall. 41

The record of the last meeting was read.

The Committee on Membership and Resignations reported the following Fellows as having arrived at the age of sixty, paid their dues, and expressed their desire to become Retired Members, and recommended that their request be granted, viz.:

Dr. Andrew Mackie, . .	New Bedford;
" Geo. W. Otis, . . .	Chelsea;
" Winslow Lewis, . .	Boston;
" Thomas R. Boutelle, . .	Fitchburg;
" John C. Beach, . .	Sandisfield.

The Committee further recommended, that the request of Dr. C. McAllister, of Stockbridge, now sixty-nine years of age, to have his arrears remitted and to become a Retired Member, be granted.

The same Committee reported upon the names of candidates for Honorary Membership.

The Council proceeded to ballot, and Dr. Bernhard Roeser, of Athens, and Dr. Gaetano Valerj, of Rome, were duly elected.

The Chair nominated the following Standing Committees:

On Treasurer's Account.

Dr. Silas Durkee, . .	Boston;
Dr. Phineas M. Crane, .	E. Boston.

On Library.

Dr. Nath'l B. Shurtleff, .	Boston;
Dr. Edw. H. Clarke, . .	Boston.

Dr. Jeffries offered the following resolution, which was adopted:—

Resolved, "That the Massachusetts Medical Society petition the Legislature to grant the petition of the Boston Sanitary Association, for the establishment of a State Board of Health, for the purpose of looking after the sanitary interests of the people, with a competent Secretary, as the Agricultural Board and the Board of Education look after the interests of Agriculture and Education.

"That the Board of Health have charge of the registration of Births, Marriages and Deaths, and the census of all the other vital statistics of the Commonwealth.

"That the Board have some visitatorial power in connection with the Lunatic Hospitals, and all other State Charitable Institutions where the sick and suffering are kept.

"That every member of the Medical Society be requested to use his influence with the senator and representatives from his district, to persuade them to support this measure in the Legislature.

"That the several District Societies be requested to take action in behalf of this measure, and use their efforts for its adoption.

"That a petition be drawn up for this purpose, signed by the President and Secretary, and sent by a committee to the Legislature, which committee be requested to appear before any committee of the Legislature and urge the adoption of this measure."

Voted, "That the President be authorized to appoint a committee of five to present the petition, ordered by the above resolution, to the Legislature."

The Chair appointed Drs. J. Jeffries of Boston, George Choate of Salem, Anson Hooker of Cambridge, Charles E. Stedman of Boston, and B. E. Cotting of Roxbury.

The meeting dissolved.

JOHN B. ALLEY,
Recording Secretary.

March Meeting, 1861.

A Special Meeting of the Councillors of the Massachusetts Medical Society was held at the Society's Room, in Temple Place, Boston, on Friday, March 15th, 1861.

The President in the Chair.

The following Councillors were present:—

Norfolk.	H. J. Bigelow,	J. Homans,
B. E. Cotting,	H. I. Bowditch,	G. C. Shattuck,
E. Jarvis.	S. Cabot, Jr.	C. E. Ware,
Plymouth.	W. E. Coale,	J. Ware.
A. Millet.	P. M. Crane,	
	J. Flint,	*Worcester.*
Suffolk.	C. Gordon,	H. A. Jewett.
J. B. Alley,	G. Hayward,	17

The records of the last meeting were read.

The President stated that the object of calling a Special Meeting of the Councillors at this time, was to consider the subject of petitioning the President of the United States to enforce the law known as the "Drug Law," passed by Congress in 1848, and to recommend to him the reference of all candidates for the office of Inspector of Drugs, to the Medical Boards of Examination of the Army or Navy, who shall report their selections to the appointing power through their respective departments.

Upon motion of Dr. J. Ware, of Boston, it was

Voted, "That the President be authorized, in behalf of the Massachusetts Medical Society, to sign a petition to the proper authorities, comprising the subject now under consideration."

Voted, "That a committee of three be chosen to meet and confer with delegations from local medical societies and the Massachusetts College of Pharmacy, upon the subject of drafting a suitable petition to be addressed to the proper authorities at Washington."

The Chair nominated Drs. Gordon and Crane of Boston, and Dr. Jewett of Northboro', and they were chosen.

The meeting dissolved.

JOHN B. ALLEY,

Recording Secretary.

Annual Meeting, May 28, 1861.

The Annual Meeting of the Councillors of the Massachusetts Medical Society was held on Tuesday, May 28th, 1861, at 7½, P.M., at the Society's Room, No. 12 Temple Place, Boston.

The President in the Chair.

The following Councillors were present:—

Barnstable.
E. W. Carpenter.

Bristol South.
G. Atwood,
W. W. Comstock,
F. Hooper,
A. Mackie.

Essex North.
H. C. Perkins.

Essex South.
E. Hunt.

Middlesex North.
C. A. Savory.

Middlesex East.
B. Cutter.

Middlesex South.
C. Harris,
F. R. C. Kittredge,
J. Pratt,
A. C. Webber.

Norfolk.
B. E. Cotting,
B. Cushing,
C. C. Holmes,
E. Jarvis,
A. LeB. Monroe.

Plymouth.
A. Millett,
C. B. Pratt,
J. Wilde.

Suffolk.
J. B. Alley,
J. Ayer,
H. J. Bigelow,
H. I. Bowditch,
S. Cabot, Jr.
W. E. Coale,
P. M. Crane,
H. Dyer,
J. Flint,
J. B. Forsyth,
A. A. Gould,
G. Hayward,
J. Homans,
J. Jeffries,
S. Morrill,
C. G. Putnam,
D. H. Storer,
C. E. Ware,
J. Ware,
J. M. Warren.

Worcester.
H. A. Jewett,
E. Lovell,
J. G. Metcalf,
W. Workman.

45

The record of the last meeting was read.

The Recording Secretary read the names of those who had joined the Society during the year, and of Fellows deceased since the last Annual Meeting.

The Treasurer read his Annual Report, and mentioned the fact that a remittance sent by the Treasurer of the Franklin District, had failed to reach him, and requested instructions.

On motion of Dr. Bowditch,

Voted, "That the Society assume the loss."

On motion of Dr. Jeffries, of Boston,

Voted, "That the Treasurer be instructed to inform the Treasurers of District Societies, that hereafter all money transmitted to him, otherwise than by draft payable to his order, must be at the risk of the Treasurer thus transmitting."

The Treasurer also alluded to the fact that no moneys had been received from the Treasurer of the Berkshire District Medical Society for four years.

On motion of Dr. Hooper, of Fall River,

Voted, "That a communication be sent to the Berkshire District Society, signed by the President and Secretary, stating this fact, and requesting an explanation."

The Treasurer read the list of Fellows delinquent in the payment of their assessments.

On motion of Dr. Ayer, of Boston,

Voted, "That the Treasurer, in consultation with the Committee on Finance, be requested to prepare a list of those who are much in arrears, with reference to striking off their names from the list of Fellows."

The report of the Auditing Committee was read and accepted.

The Committee on Publications reported that two books had been selected for distribution to the Fellows for the present year — one, Dr. James Jackson's work on "The Utility of Medicine," would be distributed at the Annual Meeting; the other, Dr. William Read's work on "Placenta Prævia," would be ready in a few weeks.

The Committee on Resignations reported that

Dr. Nelson Carpenter, . .	Warren,
" Milton Fuller, . . .	Boston,

had expressed their desire to become Retired Members, and recommended that their request be granted.

The recommendation was adopted.

The Chair appointed Drs. Ayer of Boston, and Millet of Abington, to collect, sort and count the votes for officers of the Society.

Voted, "That a Committee of one Fellow from each District Society be appointed to nominate a list of officers of the Society for the ensuing year."

The Committee subsequently reported the following: —

Drs. JOHN HOMANS, Boston, ...	*President.*
JOHN G. METCALF, Mendon, . . .	*Vice-President.*
BENJAMIN E. COTTING, Roxbury, . .	*Cor. Secretary.*
JOHN B. ALLEY, Boston, ...	*Rec. Secretary.*
AUGUSTUS A. GOULD, Boston, . . .	*Treasurer.*
WILLIAM E. COALE, Boston, . . .	*Librarian.*

The Society proceeded to ballot, and the candidates nominated by the Committee were elected.

On motion of Dr. Millet, of Abington,

Voted, "That the next Annual Meeting be held in the city of Boston."

On motion of Dr. Holmes, of Milton,

Voted, "That the nomination of an Anniversary Chairman, Orator and Committee of Arrangements, be referred to the Committee for nominating officers."

The Committee subsequently reported the following list:

Anniversary Chairman.

HENRY J. BIGELOW, M.D., ... Boston.

Orator.

HENRY I. BOWDITCH, M.D., ... Boston.

Committee of Arrangements.

Drs. William E. Coale,	William W. Morland,
Francis Minot,	Henry W. Williams,
Samuel A. Green,	James C. White.

And the candidates were unanimously chosen.

On motion of Dr. Savory, of Lowell,

Voted, "That the thanks of the Councillors be presented to the Trustees of the Lowell Institute for the use of the Hall for the Annual Meeting for several years."

On motion of Dr. Jarvis,

Voted, "That the Report on the establishment of a Sanitary Commission be referred to a Committee."

Voted, "That the President be authorized to appoint said Committee."

The Chair nominated the following Standing Committees, and they were chosen.

Committee on Publications.

Drs. C. G. Putnam, Geo. C. Shattuck, Wm. W. Morland.

Committee on Membership and Resignations.

Drs. A. A. Gould, Samuel Morrill, James Ayer.

Committee on Finance.

Drs. S. D. Townsend, John Ware, Jacob Hayes.

The meeting was dissolved.

JOHN B. ALLEY,
Recording Secretary.

PROCEEDINGS OF THE SOCIETY.

ADJOURNED MEETING.

October 3, 1860.

An Adjourned Meeting of the Massachusetts Medical Society was held on Wednesday, October 3d, 1860, at 12 M., at the Society's Hall, in Temple Place.

The Vice-President in the Chair.

The records of the last meeting were read.

The Secretary read the following communication from the President of the Society, Dr. John Homans:

To the Fellows of the Mass. Medical Society:

I ask your acceptance of the Photograph now hanging on your wall, being a full-length portrait of Dr. James Jackson. It has been finished with especial reference to this place, by Mr. F. D. Day, a distinguished portrait painter of this city, and is considered, by all who have seen it, a beautiful work of art and an excellent likeness. It seems to me fitting that the physician whose medical opinion we regard as the highest authority, the man so universally respected, should be, as it were, always present at our deliberations.

You will observe that Dr. Jackson was born on October 3d, 1777, and it is perhaps a singular coincidence that this presentation should happen to be made on the anniversary of his birth, he having completed his eighty-third year this day.

I am, respectfully, yours,

John Homans.

4 Temple Place, Oct. 3d, 1860.

On motion of Dr. Hooper, of Fall River,

Voted, "That the portrait be accepted, and the thanks of the Society be presented to the donor for his valuable and appropriate gift."

Dr. Gould presented a written communication from Dr. James Jackson, urging that the following resolution, passed at the meeting of which this is an adjournment, viz., "*Resolved,* That the Society disclaim all responsibility contained in this Annual Address," be reconsidered.

A motion to reconsider was made, and adopted by a vote of twenty-seven in the affirmative and seventeen in the negative.

Dr. Bowditch offered the following resolutions, which were adopted.

Resolved, "That the Massachusetts Medical Society hereby declares that it does not consider itself as having endorsed or censured the opinions in former published Annual Addresses, nor will it hold itself responsible for any opinions or sentiments advanced in any future similar addresses."

Resolved, "That the Committee on Publication be directed to print a statement to that effect at the commencement of each Annual Address which may hereafter be published."

Voted, to adjourn to the first Wednesday in November, at 10, A.M., at the Society's Hall, Temple Place.

CHARLES E. WARE,
Recording Secretary pro tempore.

ADJOURNED MEETING, NOV. 7, 1860.

An Adjourned Meeting of the Massachusetts Medical Society was held on November 7th, 1860, at 10, A.M., at the Society's Rooms, in Temple Place.

The President in the Chair.

The records of the last meeting were read and approved.

The following resolution, which was passed by the Councillors at their Stated Meeting in October, was adopted in concurrence.

Voted, "To appropriate, towards the payment of the debts incurred by the Society in the assumption of the expenses of the several suits brought by Ira Barrows *vs.* Drs. Storer, Bell and Carpenter, such a sum as has, before this time, been appropriated to a dinner, to the amount of six hundred dollars annually."

Voted, "That the Massachusetts Medical Society accepts the legacy of the late Hon. Jonathan Phillips, of the sum of ten thousand dollars, and hereby authorizes Dr. Augustus A. Gould, the Treasurer of the Society, to receive the same."

The Corresponding Secretary presented the following communication: —

To the Corresponding Secretary of the Mass. Med. Society.

MY DEAR SIR:

I take the liberty to send to you a portrait of the late Dr. EDWARD A. HOLYOKE, the first President of the Massachusetts Medical Society. I have had it prepared for the Society, and I beg that they may accept it.

You will see on the back of the picture a note respecting it. It is a photographic copy of a picture in my possession. I had several copies made lately, with the design to ask our Society to hang one of them upon their walls.

With great regard,

Dear Sir, yours,

J. JACKSON.

HAMILTON PLACE, OCT. 5, 1860.

On motion of Dr. Chapin, of Winchester,

Voted, "That the portrait be accepted, and the thanks of the Society be presented to the donor for his interesting and valuable gift."

Adjourned.

JOHN B. ALLEY,
Recording Secretary.

ANNUAL MEETING.

MAY 29, 1861.

THE Annual Meeting of the Massachusetts Medical Society was held on Wednesday, May 29th, 1861, at 10 o'clock, A.M., in the Hall of the Lowell Institute, Boston.

The President, Dr. John Homans, in the Chair.

The record of the last meeting was read.

The Secretary read the names of those who had become Fellows during the year, and the Fellows deceased since the last anniversary meeting.

Fellows admitted during the year.

Robert Andrews,	Orange.
George J. Arnold,	Roxbury.
Noyes Barstow,	Bernardston.
Edward B. Barrett,	Northampton.
Joseph N. Bates,	Worcester.
John G. Blake,	Boston.
Francis H. Brown,	Boston.
James T. Buttrick,	Westford.
C. G. Burnett,	Webster.
Hall Curtis,	Boston.
Charles G. A. Eayers,	Lowell.
Benjamin Fearing, Jr.	Wareham.
Asa F. Gray,	Rowley.
Maurice K. Hartnett,	Boston.
Henry B. Hubbard,	Taunton.
Fayette Jewett,	Waltham.
H. E. Kemp,	N. Prescott.
F. R. C. Kittredge,	Waltham.
F. B. A. Lewis,	Adams, N. Y.
Franklin Meacham,	W. Stockbridge.
M. S. Mead,	Northfield.
George T. Moffatt,	Boston.
James M. Moore,	S. Groton.
Patrick A. O'Connell,	Boston.
Asa F. Pattee,	W. Amesbury.
John M. Pillsbury,	Lawrence.
J. P. Prince,	Lynn.
Loren H. Pease,	Amherst.

H. S. Plympton,	Cambridge.
Ashael A. Plympton,	Shirley.
Arthur Ricketson,	New Bedford.
James F. Richards,	N. Bridgewater.
William E. Rice,	Boston.
George T. Shipley,	Boston.
Charles H. Spring,	Boston.
Edmund Seyffarth,	Lawrence.
Reuben Spaulding,	Hatfield.
Silas E. Stone,	Walpole.
R. Cresson Styles,	Pittsfield.
George F. Thompson,	Belchertown.
Charles C. Topliff,	Lunenburg.
Josiah N. Willard,	Boston.
Joseph O. West,	Princeton.
Orin Warren,	W. Newbury.
A. A. C. Williams,	Pittsfield.

Honorary Members.

Bernhard Roeser,	Athens, *Greece.*
Gaetano Valerj,	Rome, *Italy.*

The Treasurer read his Annual Report, and stated that the heavy totals exhibited in the account, had arisen from the receipt and investment of a large legacy, and from temporary loans obtained and subsequently repaid. From the large balance due the Treasurer, it might seem that the debts of the Society had increased during the year. This arises from the fact that nearly all the out-standing debts now stand in the name of the Treasurer. About $600 arrearages for printing and for legal expenses have been paid, so that the liabilities have in reality been reduced about $350; and will be at once still farther reduced in the sum of $600, the sum usually devoted to the annual dinner, and appropriated by vote to this purpose.

The legacy of the late Hon. Jonathan Phillips, of $10,000, was received in March last, and by the assistance of the President and the advice of the Finance Committee, has been advantageously invested in a first mortgage on a most eligible estate in the city, of more than double the value, at six per cent. interest, payable semi-annually. In the pre-

sent state of the times, this must be considered a most fortunate investment.

The Society is greatly indebted to the President on this occasion, for investigating and adjusting the legal claims assumed by the Society, and for his ready pecuniary aid in many other emergencies.

The Report of the Auditing Committee was read by the Secretary.

The Committee on Scientific Communications presented the following Report: —

The Committee on Scientific Communications report, that they have found greater difficulty this year than on any previous year, in procuring communications. They have, however, the pleasure of stating that the Middlesex East District Medical Society will make a brief statement of the Statistics of Zymotic Diseases in that district. Dr. Ruppaner, of Boston, will give an abstract of a paper prepared by him on Subcutaneous Injections for the Relief of Neuralgia.

Respectfully submitted,

JNO. GEO. METCALF,
HENRY I. BOWDITCH,
GEORGE CHOATE.

Dr. E. Cutter read the report on Zymotic Diseases. Owing to the absence of Dr. Ruppaner, the paper on Subcutaneous Injections was not presented.

Dr. Geo. C. Lincoln, of South Malden, reported very fully the case of a man, 25 years of age, from whose abdomen there was removed, after death, a tumor which weighed 81 pounds — the duration of the disease having been only eighteen months. The mass gave during life a most remarkable sense of fluctuation. A cast in plaster of the tumor was exhibited, and the case will be published in the Boston Medical and Surgical Journal.

Dr. J. B. S. Jackson made some remarks upon the case, having had the care of the patient for a few weeks at the Hospital. He thought that the structure of the tumor may

have resembled that of one which was described by Prof. Delamater in the Cleveland (Ohio) Medical Gazette for August, 1859; and which last was, so far as he was aware, the largest tumor on record, the estimated weight of the patient after death being less than 100 pounds, and that of the tumor 275 pounds. Extracts from Prof. D.'s report were read, and a daguerreotype of the patient, taken some time before death, was exhibited.

A series of resolutions which had been previously adopted by the Councillors, passed in concurrence. (Vide pp. 4 and 5.)

A communication was received from Dr. Miller, of Pittsfield, inviting the Fellows of the Society to a dinner in Berkshire on the next Anniversary Meeting.

As the Councillors had voted at their Annual Meeting that the next meeting should be held in Boston, the question of acceptance was laid on the table.

On motion of Dr. James Jackson, of Suffolk,

Voted, "That the thanks of the Society be presented to Dr. Miller for his polite invitation."

A letter was received from Dr. J. M. Warren, inviting the Fellows of the Society to visit the Warren Museum in Chestnut Street.

At 1 o'clock, P.M., the Annual Discourse was delivered by Dr. Henry C. Perkins, of Newburyport, on "The Duties of the Physician and Surgeon in War."

On motion of Dr. Hunt, of Essex,

Voted, "That the thanks of the Society be presented to Dr. Perkins, for his eloquent, appropriate and patriotic address."

Adjourned.

JOHN B. ALLEY,
Recording Secretary.

Dr. Massachusetts Medical Society in Account with Augustus A. Gould, Treasurer. Cr.

Received at Annual Meeting,			$458.00
Sundry Assessments,			403.50
From Districts.	Barnstable,	$36.00	
	Essex North,	60.00	
	Essex South,	60.00	
	Franklin,	60.00	
	Hampden,	48.00	
	Hampshire,	45.00	
	Middlesex East,	99.00	
	Middlesex North,	57.00	
	Middlesex South,	63.00	
	Norfolk,	66.00	
	Plymouth,	57.00	
	Suffolk,	336.00	
	Worcester,	159.00	
	Worcester North,	21.00	
			1,167.00
Notes payable,			3,370.71
Income of Invested Funds,			1,134.10
Rents and Taxes,			625.74
Librarian—Sale of Books,			8.00
Secretary—Diplomas,			15.00
Legacy of Hon. Jonathan Phillips,			10,000.00
Profit and Loss—Moneys Refunded,			8.50
Balance due Treasurer,			1,136.65
			$18,327.20

AUGUSTUS A. GOULD, Treas.

Balance from last Account due Treasurer,			$755.16
Annual Dinner,			700.00
Publications—Annual Communications, &c.		800.00	
Braithwaite's Retrospect,		880.00	
			1,680.00
Refunded to District Societies,			545.11
District Treasurers' Commissions,			50.65
Litigation—Lowell Commissioners,		75.25	
Barrows Suit,		1,940.71	
			2,015.96
Rent, Taxes, and care of Rooms,			629.33
Notes Payable,			1,500.00
Notes Receivable,			10,000.00
Interest and Discount,			68.45
Incidental Expenses—Secretary's Bills,		42.02	
Annual Meeting,		10.00	
Collector,		8.95	
Advertising,		8.75	
Postages and Expenses,		10.76	
			80.48
Profit and Loss—Uncurrent Money,			2.06
Treasurer's Salary,			300.00
			$18,327.20

May 28, 1861. Balance to new Account, $1,136.65.

Officers of the Massachusetts Medical Society.

1861 — 62.

Chosen May 29, 1861.

JOHN HOMANS, ... Boston, ... President.
JOHN G. METCALF, . . . Mendon, . . . Vice-President.
BENJAMIN E. COTTING, Roxbury, . . . Cor. Secretary.
JOHN B. ALLEY, ... Boston, ... Rec. Secretary.
WILLIAM E. COALE, . . Boston, ... Librarian.
AUGUSTUS A. GOULD, . Boston, ... Treasurer.

Vice-Presidents (Ex-Officiis.)

[Arranged according to Seniority.]

Paul L. Nichols.
Simon Whitney.
Augustus Torrey.
Benjamin Cutter.
Jonas A. Marshall.
John B. S. Jackson.
A. Le Baron Monroe.
Edward Barton.
Kendall Flint.
Israel H. Taylor.
George W. Doane.
William W. Comstock.
P. Le Breton Stickney.
Charles Howe.
Charles A. Savory.
Oramel Martin.
Clarkson T. Collins.

Councillors.

Barnstable. — Drs. Elijah W. Carpenter, Chatham; Samuel H. Gould, Brewster; John Harpur, Sandwich; Chauncy M. Hurlburt, South Dennis.

BERKSHIRE. — Drs. Henry H. Childs, Pittsfield; J. Leland Miller, Pittsfield; E. B. Root, W. Stockbridge; Henry L. Sabin, Williamstown.

BRISTOL NORTH. — Drs. Benoni Carpenter, Attleboro'; Johnson Gardner, Pawtucket; Joseph Murphy, Taunton; Thaddeus Phelps, Attleboro'.

BRISTOL SOUTH. — Drs. George Atwood, Fairhaven; William W. Comstock, Middleboro'; Joseph Haskell, Rochester; Foster Hooper, Fall River; Andrew Mackie, New Bedford.

ESSEX NORTH. — Drs. Josiah Atkinson, Newburyport; John Crowell, Jr., Haverhill; Stephen Huse, Methuen; Henry C. Perkins, Newburyport; Francis J. Stevens, Haverhill.

ESSEX SOUTH. — Drs. Benjamin Cox, Jr., Salem; Benjamin Haskell, Rockport; Ebenezer Hunt, Danvers; James M. Nye, Lynn; Edw. B. Peirson, Salem; Augustus Torrey, Beverly.

FRANKLIN. — Drs. G. C. Hill, Warwick; Chenery Puffer, Shelburne Falls; Elijah Stratton, Northfield; N. G. Trow, Sunderland.

HAMPDEN. — Drs. Cyrus Bell, Agawam; William G. Breck, Springfield; A. Bryant Clarke, Holyoke; John Witten, Brimfield.

HAMPSHIRE. — Drs. James Dunlap, Northampton; F. C. Green, Westfield; William M. Trow, Haydenville.

MIDDLESEX NORTH. — Drs. John C. Bartlett, Chelmsford; Elisha Huntington, Lowell; Austin March, Carlisle; Edw. A. Perkins, Tyngsboro'; Charles A. Savory, Lowell.

MIDDLESEX EAST. — Drs. Benjamin Cutter, Woburn; William Ingalls, Winchester; Joseph D. Mansfield, South Reading; Truman Rickard, Woburn.

MIDDLESEX SOUTH. — Drs. William M. Barrett, Ashland; Luther V. Bell, Charlestown; William J. Currier, Lexington; Levi Goodnough, Sudbury; Jonas C. Harris, Ashland; Jacob Hayes, Charlestown; R. L. Hodgdon, W. Cambridge; A. A. Kendall, Newton L. F.; F. R. C. Kittredge, Waltham; Jefferson Pratt, Hopkinton; John L. Sullivan, Malden; George I. Townsend, South Natick; A. Carter Webber, Cambridge.

NORFOLK. — Drs. BENJAMIN E. COTTING, Roxbury, *Cor. Secretary;* Benjamin Cushing, Dorchester; Joseph G. S. Hitchcock, Foxboro'; Christopher C. Holmes, Milton; Edward Jarvis, Dorchester; Benjamin Mann, Roxbury; A. Le B. Monroe, Medway; Josiah Noyes, Needham; Ebenezer Stone, Walpole.

PLYMOUTH. — Drs. Asa Millet, Abington; Calvin B. Pratt, Bridgewater; James Wilde, Duxbury.

SUFFOLK. — Drs. Jacob Bigelow; George Hayward; John Ware; JOHN HOMANS, *President;* John Jeffries; D. Humphreys Storer; John Flint; Charles G. Putnam; Henry Dyer; Abraham A. Watson; AUGUSTUS A. GOULD, *Treasurer;* Samuel Morrill; William J. Dale; Ezra Palmer, Jr.; George Bartlett; John B. S. Jackson; Nathaniel B. Shurtleff; Chas. Gordon; Henry G. Clark; Henry I. Bowditch; J. Mason Warren; George C. Shattuck; James B. Forsyth, Chelsea; Charles E. Ware; Phineas M. Crane, East Boston; Samuel Cabot, Jr.; James Ayer; Silas Durkee; WILLIAM E. COALE, *Librarian;* Henry J. Bigelow; JOHN B. ALLEY, *Recording Secretary.*

WORCESTER. — Drs. Rowse R. Clark, Whitinsville; Henry A. Jewett, Northboro'; Ephraim Lovell, West Boylston; JOHN G. METCALF, *Vice-President,* Mendon; Oramel Martin, Joseph Sargent, William Workman, Worcester; Edward M. Wheeler, Spencer.

WORCESTER NORTH. — Drs. George D. Colony, Athol; Leonard French, Ashby; David Parker, Gardner; George Jewett, Fitchburg.

Censors.

Barnstable. — Drs. Elisha W. Carpenter, Chatham; Samuel H. Gould, Brewster; Jonathan Leonard, Sandwich; Geo. Shove, Yarmouth Port; John M. Smith, Barnstable.

Berkshire. — Drs. Lucius S. Adams, Stockbridge; Frank A. Cady, Timothy Childs, Pittsfield; C. C. Holcombe, Lee.

Bristol North. — Drs. John H. Bronson, Attleboro'; John B. Chase, Henry B. Hubbard, Taunton.

Bristol South. — Drs. Lyman Bartlett, Francis D. Bartlett, John H. Mackie, *Secretary*, New Bedford; Perez F. Doggett, Wareham; Jerome Dwelley, Fall River.

Essex North. — Drs. James C. Howe, Oliver S. Lovejoy, Haverhill; Seneca Sargent, Lawrence; Jeremiah H. Sawyer, Newburyport; Jeremiah Spofford, Groveland.

Essex South. — Drs. George A. Perkins, H. Osgood Stone, and Henry Wheatland, Salem.

Franklin. — Drs. H. E. Kemp, New Salem; L. D. Seymour, Greenfield; Josiah Trow, Sunderland.

Hampden. — Drs. Alfred Lambert, George A. Otis, Springfield; Edward G. Pierce, Holyoke.

Hampshire. — Drs. John W. Barker, East Hampton; Theron Temple, Belchertown; Austin W. Thompson, Northampton.

Middlesex North. — Drs. Nathan Allen, *Secretary*, Lowell; Hezekiah C. Bickford, Billerica; Harlin Pillsbury, Lowell; Levi Howard, Chelmsford; Elisha Huntington, Lowell.

Middlesex East. — Drs. Ephraim Cutter, *Secretary*, Woburn; William H. Heath, Stoneham; William Ingalls, Winchester.

MIDDLESEX SOUTH. — Drs. J. Henry Brown, W. Newton; Moses Clark, East Cambridge; Morrill Wyman, Cambridge.

NORFOLK. — Drs. Ebenezer P. Burgess, Dedham; William C. B. Fifield, Weymouth; D. Wayland Jones, Medfield; Joel Seaverns, Jamaica Plain; Simeon Tucker, Stoughton.

PLYMOUTH. — Drs. Frank F. Forsaith, South Abington; Josiah H. Hammond, Plympton; Benjamin Hubbard, Plymouth.

SUFFOLK. — Drs. William E. Coale, *Secretary;* Henry W. Williams, Francis Minot, Charles D. Homans, Fitch E. Oliver, Boston.

WORCESTER. — Drs. Henry Clarke, *Secretary;* Thomas H. Gage, Rufus Woodward, Worcester; Frederick A. Sawyer, Sterling; M. D. Southwick, Blackstone.

WORCESTER NORTH. — Drs. Alfred Hitchcock, Fitchburg; James P. Lynde, Athol; Alfred Miller, Ashburnham; Jonathan A. White, Baldwinsville; Edward J. Sawyer, Gardner.

Commissioners of Trials.

BARNSTABLE	Franklin Dodge, ...	Harwich.
BERKSHIRE	Henry H. Childs, ...	Pittsfield.
BRISTOL NORTH . .	Thaddeus Phelps, . . .	Attleboro'.
BRISTOL SOUTH . .	Lyman Bartlett, ...	New Bedford.
ESSEX NORTH . . .	Jeremiah Spofford, . . .	Groveland.
ESSEX SOUTH . . .	George Choate, ...	Salem.
FRANKLIN	Royall N. Porter, ...	Deerfield.
HAMPDEN	Nathan Adams, ...	Springfield.
HAMPSHIRE.	Samuel A. Fisk, ...	Northampton.
MIDDLESEX NORTH .	John O. Green, ...	Lowell.

Middlesex East . .	Truman Pickard, ...	Woburn.
Middlesex South .	Anson Hooker, ...	E. Cambridge.
Norfolk	Ebenezer Alden, ...	Randolph.
Plymouth	Timothy Gordon, ...	Plymouth.
Suffolk	Silas Durkee, ...	Boston.
Worcester	William Workman, . . .	Worcester.
Worcester N. . . .	Isaac P. Willis, ...	Royalston.

Officers of the District Medical Societies.

Barnstable. — Dr. George W. Doane, Hyannis, *President;* Dr. John M. Smith, Barnstable, *Vice-President;* Dr. Samuel H. Gould, Barnstable, *Secretary;* Dr. Elijah W. Carpenter, Chatham, *Treasurer and Librarian.*

Berkshire. — Dr. Clarkson T. Collins, Great Barrington, *President;* Dr. Timothy Childs, Pittsfield, *Vice-President;* Dr. R. Cresson Stiles, Pittsfield, *Secretary;* Dr. Abner M. Smith, Pittsfield, *Treasurer.*

Bristol North. — Dr. Charles Howe, Raynham, *President;* Dr. John R. Bronson, Attleboro', *Vice-President;* Dr. John B. Chase, Taunton, *Secretary;* Dr. Thaddeus Phelps, Attleboro', *Librarian.*

Bristol South. — Dr. William W. Comstock, Middleboro', *President;* Dr. George Atwood, Fairhaven, *Vice-President;* Dr. Arthur Ricketson, New Bedford, *Secretary;* Dr. Frederick H. Hooper, New Bedford, *Treasurer and Librarian.*

Essex North. — Dr. Kendall Flint, Haverhill, *President;* Dr. Enoch Cross, Newburyport, *Vice-President;* Dr. Martin Root, Byfield, *Secretary and Treasurer;* Dr. William Coggswell, Bradford, *Librarian.*

ESSEX SOUTH. — Dr. Augustus Torrey, Beverly, *President;* Dr. Benjamin Cox, Jr., Salem, *Vice-President;* Dr. David Choate, Salem, *Secretary;* Dr. William Mack, Salem, *Treasurer;* Dr. H. Osgood Stone, Salem, *Librarian.*

FRANKLIN. — Dr. Edward Barton, Orange, *President;* Dr. Humphrey Gould, Rowe, *Vice-President;* Dr. Charles T. Lyons, Coleraine, *Secretary, Treasurer and Librarian.*

HAMPDEN. — Dr. P. Le Breton Stickney, Chicopee, *President;* Dr. William G. Breck, Springfield, *Vice-President;* Dr. Geo. A. Otis, Springfield, *Secretary, Treasurer and Librarian.*

HAMPSHIRE. — Dr. Israel H. Taylor, Pelham, *President;* Dr. James Dunlap, Northampton, *Vice-President;* Dr. Edward B. Barrett, Northampton, *Secretary;* Dr. Artemas Bell, Southampton, *Treasurer.*

MIDDLESEX NORTH. — Dr. Charles A. Savory, Lowell, *President;* Dr. Jonathan Brown, Tewksbury, *Vice-President;* Dr. Harlin H. Pillsbury, Lowell, *Secretary;* Dr. Nathaniel B. Edwards, North Chelmsford, *Treasurer;* Dr. Charles G. A. Eayrs, Lowell, *Librarian.*

MIDDLESEX EAST. — Dr. Benjamin Cutter, Woburn, *President;* Dr. David Dana, Reading, *Vice-President;* Dr. Ephraim Cutter, Woburn, *Secretary;* Dr. Benjamin Cutter, Woburn, *Treasurer and Librarian.*

MIDDLESEX SOUTH. — Dr. Simon Whitney, Framingham, *President;* Dr. W. W. Wellington, Cambridge, *Vice-President;* Dr. Alfred Hosmer, Watertown, *Secretary;* Dr. Royal S. Warren, Waltham, *Treasurer.*

NORFOLK. — Dr. A. Le Baron Monroe, Medway, *President;* Dr. Erasmus D. Miller, Dorchester, *Vice-President;* Dr. Edward Jarvis, Dorchester, *Secretary;* Dr. Danforth P. Wight, Dedham, *Treasurer;* Dr. David S. Fogg, South Dedham, *Librarian.*

PLYMOUTH. — Dr. Paul L. Nichols, Kingston, *President;* Dr. Winslow Warren, Plymouth, *Vice-President;* Dr. Henry N. Jones, Kingston, *Secretary and Treasurer;* Dr. Francis Collamore, Pembroke, *Librarian.*

SUFFOLK. — Dr. John B. S. Jackson, Boston, *President;* Dr. Charles E. Buckingham, Boston, *Vice-President;* Dr Calvin G. Page, Boston, *Secretary;* Dr. Francis Minot, Boston, *Treasurer;* Dr. James C. White, Boston, *Librarian.*

WORCESTER. — Dr. Oramel Martin, Worcester, *President;* Dr. Calvin P. Fiske, Fiskedale, *Vice-President;* Dr. Thomas H. Gage, Worcester, *Secretary;* Dr. J. Marcus Rice, Worcester, *Treasurer;* Dr. Samuel F. Haven, Jr., Worcester, *Librarian.*

WORCESTER NORTH. — Dr. Jonas A. Marshall, Fitchburg, *President;* Dr. Alvah Godding, Winchendon, *Vice-President;* Dr. Thomas R. Boutelle, Fitchburg, *Treasurer;* Dr. James R. Wellman, Fitchburg, *Secretary and Librarian.*

SUPPLEMENT TO THE CATALOGUE.

LIST OF THOSE WHO HAVE BECOME FELLOWS SINCE THE PRINTING OF THE CATALOGUE IN 1854.

☞ Fellows whose *names* are not written IN FULL in the Catalogue, will please send them to the Recording Secretary, John B. Alley, 35 Boylston Street, Boston, forthwith, that they may be inserted in the new edition.

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1855	Abbott, Ezra	Canton			
1855	Adams, Zabdiel B.	Boston			
1860	Allen, A. N.	Pittsfield			
1859	Allen, Justin	Topsfield			
1860	Ames, Joseph S.	Holden			
1861	Andrews, Robert	Orange			
1861	Arnold, George J.	Roxbury			
1858	Aten, Henry F.	Dedham			
1854	Barker, Bowen	S. Hanson			
1860	Barker, John W.	Easthampton			
1860	Barnes, Edward F.	Marlborough			
1855	Barnes, John	Milford			
1856	Barnes, Norman S.	Pittsfield			
1861	Barrett, Edward B.	Northampton			
1858	Barrett, William M.	Ashland			
1861	Barstow, Noyes	Bernardston			
1855	Bartlett, Ezra	Concord, N. H.			
1861	Bates, Joseph N.	Worcester			
1856	Beals, H. H.	Pittsfield			
1858	Bement, John W.	Shelburne Falls			
1857	Bemis, Merrick	Worcester			
1855	Bemis, Nathaniel O.	Hubbardston			
1855	Blake, John E.	Middletown, Ct.			
1861	Blake, John G.	Boston			
1859	Both, Carl	Boston			
1859	Boynton, Royal B.	Townsend			
1855	Brackett, Wm. T. S.	Edgartown			
1860	Breed, B. B.	Lynn			
1858	Brewster, John M., Jr.	Palmer Depot			
1856	Briggs, Charles E.	Boston			
1857	Brink, Edwin	Pittsfield			
1861	Brown, Francis H.	Boston			
1855	Brown, J. Henry	West Newton			
1857	Brown, Orlando	Wrentham			
1860	Bryant, Albert H.	Natick			
1859	Burleigh, William H.	Lawrence			
1859	Burge, William B.	Taunton			
1855	*Burgess, G. M.	Blackstone		1859	42
1861	Burnett, C. G.	Webster			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1856	Bushnell, William	Boston			
1861	Buttrick, James T.	Westford			
1858	Campbell, Benjamin	East Boston			
1858	Chamberlain, Eben. N.	Millbury			
1860	Chapin, Horace	Fairmount			
1856	Chase, Irah E.	Haverhill			
1858	Chase, John B.	Taunton			
1858	Chase, Preston M.	Danvers			
1858	Cheever, David W.	Boston			
1855	Clark, Henry	Worcester			
1858	Coggswell, George B.	Bridgewater			
1859	Collamore, George A.	W. Bridgewater			
1855	Collins, Clarkson T.	Great Barrington			
1855	Cooke, McLaurin F.	Boston			
1856	Coolidge, James	Orange			
1857	Cowdray, Harris	Acton			
1856	Cowles, H.	Saxonville			
1859	Crehore, Charles F.	Boston			
1856	Crowell, John, Jr.	Haverhill			
1857	Crozier, Arthur T.	Maysville, Ark.			
1861	Curtis, Hall	Boston			
1856	Cutter, Ephraim	Woburn			
1860	Dean, John	Boston			
1859	Delano, Marcus F.	Leominster			
1860	Dewolf, Oscar C.	Pittsfield			
1860	Dow, John O.	Harvard			
1858	Draper, Joseph	Greenfield			
1857	Drew, David F.	Lynn			
1855	Durgin, Elijah S.	Boston			
1861	Eayrs, Charles G. A.	Lowell			
1855	Fabyan, George	Boston			
1858	Ferguson, Hugh	South Boston			
1858	Fifield, William C. B.	Weymouth			
1855	Fiske, Daniel S.	East Brookfield			
1855	Flagg, Samuel B.	Boston			
1861	Fearing, Benjamin, Jr.	Wareham			
1856	Fobes, Joseph B.	Hanover			
1856	Forsaith, Francis F.	South Abington			
1859	Foss, Stephen	Boston			
1857	Foster, James M.	Springfield			
1860	French, John O.	Hanover			
1860	Fuller, Henry H.	Lancaster			
1856	Gage, Daniel Parker	Lowell			
1856	Gale, George F.	Amherst			
1857	Galloup, John S.	Medfield			
1858	Garland, George W	Lawrence			
1859	Godding, William W.	Winchendon			
1859	Goodell, Jonathan W.	Greenwich			
1859	Gould, Joseph F.	South Boston			
1859	Gould, Joshua B.	South Royalston			
1861	Gray, Asa F.	Rowley			
1858	Green, John	Worcester			
1856	Green, Samuel A.	Boston			
1858	Griggs, Samuel	Westboro'			
1858	Griggs, Thomas T.	Grafton			
1859	Ham, Abner	Boston			
1859	Hartley, James W.	Fall River			

Admitted.	Name	Residence.	Retired.	Died.	Age.
1853	Harris, J. C.	W. Cambridge			
1861	Hartnett, Maurice K.	Boston			
1860	Harwood, Harry J.	Lowell			
1856	Hatch, Horace	Brookline			
1855	Haven, Samuel F., Jr.	Worcester			
1859	Hay, Gustavus	Boston			
1858	Hayward, John McLean	Boston			
1857	Hayward, Nathan, Jr.	Roxbury			
1858	Head, George E., Jr.	Boston			
1859	Heard, J. Theodore	Boston			
1855	Henderson, Jophanus	Somerville			
1856	Hill, Edward L.	Williamsburg			
1858	Hill, Gardner C.	Warwick			
1856	*Hill, James S.	Sacramento, Cal.		1857	32
1855	Holcomb, Clifford C.	Lee			
1855	Holman, Silas A.	Taunton			
1859	Holmes, A. R.	New Bedford			
1858	Holmes, H. M.	South Adams			
1855	Hooker, Anson P.	E. Cambridge			
1859	Hooper, Frederick H.	New Bedford			
1860	Hoskins, Thomas H.	Boston			
1856	Hosmer, Alfred	Watertown			
1856	How James C.	Haverhill			
1857	Howe, George M.	Harvard			
1861	Hubbard, Henry B.	Taunton			
1860	Hubon, Peter E.	Worcester			
1859	Hurd, Samuel H.	Charlestown			
1856	Hurd, Yorick C.	Amesbury			
1858	Hutchins, John W.	Newton			
1856	Hyde, George S.	Boston			
1857	Janes, Henry	Waterbury, Vt.			
1858	Jeffries, B. Joy	Boston			
1854	Jenks, Thomas L.	Boston			
1856	Jewett, Charles C.	Holliston			
1861	Jewett, Fayette	Waltham			
1856	Jones, D. Wayland	Medfield			
1859	Jordan, Charles	South Reading			
1855	Keep, Samuel H.	Boston			
1861	Kemp, H. E.	N. Prescott			
1855	Kendall, Albert A.	Newton L. Falls			
1860	Kidder, Moses W.	Lowell			
1861	Kittredge, F R. C.	Waltham			
1855	*Knight, Ebenezer	Brimfield		1857	
1856	Kob, Charles F.	Boston			
1856	Lamson, John A.	Boston			
1857	Lane, William N.	Charlestown			
1856	Leach, William	Holmes's Hole			
1861	Lewis, F. B. A.	Adams, N. Y.			
1855	Lincoln, Francis M.	Boston			
1859	Lincoln, George C.	South Malden			
1859	Livermore, Abel C.	Stow			
1856	Lovejoy, Oliver S.	Haverhill			
1856	*Lynch, Thomas	South Boston		1857	25
1855	Lynde, James P.	Athol			
1858	Lyons, Charles T.	Coleraine			
1859	Mansfield, John R.	Boston			
1859	Manning, J. H.	Pittsfield			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1856	Bushnell, William	Boston			
1861	Buttrick, James T.	Westford			
1858	Campbell, Benjamin	East Boston			
1858	Chamberlain, Eben. N.	Millbury			
1860	Chapin, Horace	Fairmount			
1856	Chase, Irah E.	Haverhill			
1858	Chase, John B.	Taunton			
1858	Chase, Preston M.	Danvers			
1858	Cheever, David W.	Boston			
1855	Clark, Henry	Worcester			
1858	Coggswell, George B.	Bridgewater			
1859	Collamore, George A.	W. Bridgewater			
1855	Collins, Clarkson T.	Great Barrington			
1855	Cooke, McLaurin F.	Boston			
1856	Coolidge, James	Orange			
1857	Cowdray, Harris	Acton			
1856	Cowles, H.	Saxonville			
1859	Crehore, Charles F.	Boston			
1856	Crowell, John, Jr.	Haverhill			
1857	Crozier, Arthur T.	Maysville, Ark.			
1861	Curtis, Hall	Boston			
1856	Cutter, Ephraim	Woburn			
1860	Dean, John	Boston			
1859	Delano, Marcus F.	Leominster			
1860	Dewolf, Oscar C.	Pittsfield			
1860	Dow, John O.	Harvard			
1858	Draper, Joseph	Greenfield			
1857	Drew, David F.	Lynn			
1855	Durgin, Elijah S.	Boston			
1861	Eayrs, Charles G. A.	Lowell			
1855	Fabyan, George	Boston			
1858	Ferguson, Hugh	South Boston			
1858	Fifield, William C. B.	Weymouth			
1855	Fiske, Daniel S.	East Brookfield			
1855	Flagg, Samuel B.	Boston			
1861	Fearing, Benjamin, Jr.	Wareham			
1856	Fobes, Joseph B.	Hanover			
1856	Forsaith, Francis F.	South Abington			
1859	Foss, Stephen	Boston			
1857	Foster, James M.	Springfield			
1860	French, John O.	Hanover			
1860	Fuller, Henry H.	Lancaster			
1856	Gage, Daniel Parker	Lowell			
1856	Gale, George F.	Amherst			
1857	Galloup, John S.	Medfield			
1858	Garland, George W	Lawrence			
1859	Godding, William W.	Winchendon			
1859	Goodell, Jonathan W.	Greenwich			
1859	Gould, Joseph F.	South Boston			
1859	Gould, Joshua B.	South Royalston			
1861	Gray, Asa F.	Rowley			
1858	Green, John	Worcester			
1856	Green, Samuel A.	Boston			
1858	Griggs, Samuel	Westboro'			
1858	Griggs, Thomas T.	Grafton			
1859	Ham, Abner	Boston			
1859	Hartley, James W.	Fall River			

Admitted.	Name	Residence.	Retired.	Died.	Age.
1858	Harris, J. C.	W. Cambridge			
1861	Hartnett, Maurice K.	Boston			
1860	Harwood, Harry J.	Lowell			
1856	Hatch, Horace	Brookline			
1855	Haven, Samuel F., Jr.	Worcester			
1859	Hay, Gustavus	Boston			
1858	Hayward, John McLean	Boston			
1857	Hayward, Nathan, Jr.	Roxbury			
1858	ead, George E., Jr.	Boston			
1859	Heard, J. Theodore	Boston			
1855	Henderson, Jophanus	Somerville			
1856	Hill, Edward L.	Williamsburg			
1858	Hill, Gardner C.	Warwick			
1856	*Hill, James S.	Sacramento, Cal.		1857	32
1855	Holcomb, Clifford C.	Lee			
1855	Holman, Silas A.	Taunton			
1859	Holmes, A. R.	New Bedford			
1858	Holmes, H. M.	South Adams			
1855	Hooker, Anson P.	E. Cambridge			
1859	Hooper, Frederick H.	New Bedford			
1860	Hoskins, Thomas H.	Boston			
1856	Hosmer, Alfred	Watertown			
1856	How, James C.	Haverhill			
1857	Howe, George M.	Harvard			
1861	Hubbard, Henry B.	Taunton			
1860	Hubon, Peter E.	Worcester			
1859	Hurd, Samuel H.	Charlestown			
1856	Hurd, Yorick C.	Amesbury			
1858	Hutchins, John W.	Newton			
1856	Hyde, George S.	Boston			
1857	Janes, Henry	Waterbury, Vt.			
1858	Jeffries, B. Joy	Boston			
1854	Jenks, Thomas L.	Boston			
1856	Jewett, Charles C.	Holliston			
1861	Jewett, Fayette	Waltham			
1856	Jones, D. Wayland	Medfield			
1859	Jordan Charles	South Reading			
1855	Keep, Samuel H.	Boston			
1861	Kemp, H. E.	N. Prescott			
1855	Kendall, Albert A.	Newton L. Falls.			
1860	Kidder Moses W.	Lowell			
1861	Kittredge, F. R. C.	Waltham			
1855	*Knight Ebenezer	Brimfield		1857	
1856	Kob, Charles F	Boston			
1856	Lamson, John A.	Boston			
1857	Lane, William N.	Charlestown			
1856	Leach, William	Holmes's Hole			
1861	Lewis, F. B. A.	Adams, N. Y.			
1855	Lincoln, Francis M.	Boston			
1859	Lincoln, George C.	South Malden			
1859	Livermore, Abel C.	Stow			
1856	Lovejoy, Oliver S.	Haverhill			
1856	*Lynch, Thomas	South Boston		1857	25
1855	Lynde, James P.	Athol			
1858	Lyons, Charles T.	Coleraine			
1859	Mansfield, John R.	Boston			
1859	Manning, J. H.	Pittsfield			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1859	Marrisul, Felix V.	Fall River.			
1858	Marsh, Lebbeus Eaton	Granby			
1855	Mason, William	Charlestown.			
1860	Maunsell, G. N	Harwich			
1856	McCollister, J. Q. A.	South Groton.			
1855	McLean, A. S.	Springfield			
1861	Meacham, Franklin.	W. Stockbridge.			
1861	Mead, M. S.	Northfield.			
1859	Melcher, Samuel H.	Potosi, Mo.			
1859	Mignault, Deodat	Lowell			
1855	Miner, D. W.	Ware.			
1861	Moffatt, George T.	Boston.			
1861	Moore, James M.	S. Groton			
1854	Morris, William B.	Charlestown.			
1854	Morong, Edward P.	Cahawba, Ala.			
1854	Morse, James R.	North Cambridge.			
1859	Murphy, Joseph	Taunton			
1856	Neilson, W.	Manchester, N. H.			
1860	Nichols, George H.	Boston.			
1856	Nichols, George K.	Sandisfield			
1859	Nichols, John T. G.	Cambridge			
1855	Nichols, Jonathan.	Harvard			
1857	Nihill, John L.	South Boston.			
1857	Niles, John N	Boston.			
1861	O'Connell, Patrick A.	Boston.			
1855	Oliver, Henry K.	Boston.			
1858	Orcutt, Almon M.	Hardwick.			
1856	Osgood, William	Boston.			
1855	Otis, George A.	Springfield			
1855	Page, Calvin G.	Boston.			
1856	Partridge, Louis E.	Natick.			
1861	Pattee, Asa F.	W. Amesbury			
1861	Pease, Loren H.	Amherst			
1856	Perkins, D. C.	South Danvers			
1855	*Perkins, John P.	Great Barrington.		1856	
1860	Person, John W.	Lowell.			
1858	Pike, Horace G.	Boston.			
1859	Pierce, George W	Leominster.			
1859	Pillsbury, Harlin H.	Lowell			
1861	Pillsbury, John M.	Lawrence			
1859	Pinkerton, Thomas H.	Virginia City, U.T.			
1861	Plympton, Ashael A.	Shirley			
1861	Plympton, H. S.	Cambridge			
1857	Potter, Albert	Burrillville, R. I.			
1858	Porter, Royal N.	Deerfield.			
1859	Ponliot, Francis E. W.	Quebec, C. E.			
1858	Prentiss, Henry C.	Northampton			
1861	Prince, J. P	Lynn.			
1860	Prius, Peter.	Lowell.			
1859	Proctor, William B.	Lowell.			
1860	Provan, Robert.	Boston.			
1857	Ranny, Mark	Somerville			
1855	Rice, I. Marcus.	Worcester.			
1861	Rice, William E.	Boston.			
1861	Richards, James F	N. Bridgewater			
1855	Richardson, Horace	Boston.			
1856	Richardson, John H.	Chesterfield			
1861	Ricketson, Arthur	New Bedford			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1858	Robinson, Albert B.	Holden			
1859	Robinson, J. Henry	Southborough			
1860	Robinson, Marcus Tullius	Jamaica Plain			
1859	Robinson, John L.	Wenham			
1858	Rockwood, Henry	West Medway			
1855	Rogers, Seth	Worcester			
1858	Root, E. B.	W Stockbridge			
1856	Rublee, Chauncy M.	Montpelier, Vt.			
1858	Ruppaner, Antoine	Boston			
1860	Ryan, John	Charlestown			
1858	Sargent, George W.	Lawrence			
1857	Sargent, Lucius M., Jr.	Boston			
1859	Saville, Henry M.	Quincy			
1859	Sawyer, Edward J.	Gardner			
1856	Sawyer, Frederick A.	Sterling			
1860	Sawyer, John W.	Madison, Wis.			
1858	Sawyer, Jeremiah H.	Newburyport			
1861	Seyffarth, Edmund	Lawrence			
1860	Shaw, Henry Lyman	Boston			
1860	Sheldon, L. R.	Boston			
1861	Shipley George T.	Boston			
1856	Simmons, Gustavus L.	Hingham			
1858	Sinclair, Alexander D.	Boston			
1854	Smith, Abner M.	Pittsfield			
1856	Smith, Andrew M.	Williamstown			
1855	*Smith, Albert D.	Holden		1858	36
1856	Smith, G. O.	Haverhill			
1858	Smith, Jerome C.	Somerville			
1859	Smyth, James	Boston			
1858	Soule, Horatio S.	Winthrop			
1861	Spaulding, Reuben	Hatfield			
1860	Sprague, Francis P.	Boston			
1857	Spring, Charles H.	Boston			
1856	Spring, John	Dublin, Ireland			
1860	Stearns, Henry P.	Marlborough			
1860	Stearns, John, Jr.	Boston			
1855	Stedman, Charles E.	Dorchester			
1856	*Stetson, A. Everett	Dorchester		1858	32
1859	Stevens, Francis J.	Haverhill			
1861	Stiles, R. Cresson	Pittsfield			
1858	Strickland, Rial	E. Longmeadow			
1857	Stuart, Absalom B.	Westhampton			
1861	Stone, Silas E.	Walpole			
1858	Taylor, John D.	Boston			
1858	Temple, Cyrus	Heath			
1857	Temple, Theron	Belchertown			
1857	Thompson, Austin W.	Northampton			
1861	Thompson, George F.	Belchertown			
1858	Thorndike, William	Beverly			
1857	Tinker, Martin A.	Burnt Hills, N.Y.			
1857	Tjader, Antoun W.	Boston			
1861	Topliff, Charles C.	Lunenburg			
1859	Towle, Samuel K.	Haverhill			
1857	Tracy, Stephen	Andover			
1855	Trow Nathaniel G.	Sunderland			
1855	Tucker, George G.	Westfield			
1859	Tyler, John E.	Somerville			
1855	Tyler, Warren	North Brookfield			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1858	Underwood, George L.	New York			
1855	Wakefield, Adoniram J.	Hopkinton			
1856	Wakefield, Jonas F.	South Malden			
1855	Walker, Clement A.	South Boston			
1855	Walsh, John D.	Boston			
1858	Walsh, Peter D.	Boston			
1859	Walsh, Walter M.	Boston			
1856	Ware, Robert	Boston			
1860	Warren, Charles	Charlestown			
1861	Warren, Orin	W. Newbury			
1859	Webster, Joseph R.	Milton			
1856	Weeks, Charles M.	Boston			
1858	Wells, Noah	Greenfield			
1856	Wellman, James R.	Fitchburg			
1861	West, Joseph O.	Princeton			
1861	Willard, Josiah N.	Boston			
1861	Williams, A. A. C.	Pittsfield			
1855	Wheatland, Richard H.	Salem			
1857	White, James C.	Boston			
1860	White, Samuel	Springfield			
1860	White, Whitman B.	Stockbridge			
1855	Whiting, I. B.	Lee			
1856	Whittemore, Henry F.	Marblehead			
1858	Windship, George B.	Roxbury			
1855	Winsor, Frederic	Salem			
1860	Witter, John	Brimfield			
1853	Wood, Franklin A.	Lunenburg			
1855	Wood, James A.	Boston			
1855	Woodbury, Elwell	Medford			
1855	Woodward, Rufus	Worcester			
1855	Yale, John	Ware			

Gentlemen will please notify the Recording Secretary of any errors, omissions or removals.

Diplomas can be obtained by application to the Recording Secretary, enclosing the sum of One Dollar. (See By-Law No. IV.)

PROCEEDINGS OF THE COUNCILLORS.

October Meeting, 1861.

A Stated Meeting of the Councillors was held on Wednesday, October 2, 1861, at 11, A.M., at the Society's Room.

The President in the Chair.

The following Councillors were present:—

Barnstable.	*Norfolk.*	J. B. Forsyth,
J. Harpur.	B. E. Cotting,	J. M. Warren,
	J. G. S. Hitchcock,	P. M. Crane,
Essex South.	E. Jarvis,	J. Ayer,
E. Hunt,	B. Mann,	W. E. Coale,
J. M. Nye.	A. LeB. Monroe.	S. Cabot, Jr.
		J. B. Alley.
Middlesex East.	*Suffolk.*	
B. Cutter,	G. Hayward,	*Worcester.*
W. Ingalls.	J. Homans,	R. R. Clarke.
	D. H. Storer,	
Middlesex South.	A. A. Gould,	*Worcester North.*
R. L. Hodgdon,	S. Morrill,	G. D. Colony,
J. L. Sullivan,	E. Palmer,	D. Parker,
G. J. Townsend.	N B. Shurtleff,	G. Jewett.

The record of the last meeting was read and approved.

The Corresponding Secretary read a letter from Dr. Gaetano Valarj, of Rome, accepting the Honorary Membership of the Society.

The Meeting dissolved.

JOHN B. ALLEY,
Recording Secretary.

February Meeting, 1862.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held on Wednesday, February 5, 1862, at 11, A.M., at No. 12 Temple Place.

The President in the Chair.

The following Councillors were present:—

Bristol South.
W. W. Comstock.

Essex North.
H. C. Perkins.

Middlesex North.
C. A. Savery.

Middlesex South.
R. L. Hodgdon,
A. C. Webber.

Middlesex East.
W. Ingalls,
J. D. Mansfield,
H. P. Wakefield.

Norfolk.
B. E. Cotting,
E. Jarvis.

Plymouth.
A. Millett,
C. B. Pratt.

Suffolk.
J. Bigelow,
G. Hayward,
J. Homans,
J. Ware,
D. H. Storer,
J. Flint,
H. Dyer,
A. A. Watson,
A. A. Gould,
E. Palmer,
J. B. S. Jackson,
C. Gordon,
H. G. Clark,
H. I. Bowditch,
J. B. Forsyth,
J. M. Warren,
G. C. Shattuck,
C. E. Ware,
P. M. Crane,
S. Durkee,
W. E. Coale,
J. B. Alley,
S. Morrill.

The Secretary read the records of the last meeting.

The President nominated the following Committees:—

On Treasurer's Account.

Dr. Silas Durkee, . . . Boston;
Dr. Phineas M. Crane, . . . E. Boston.

On Library.

Dr. Nath'l B. Shurtleff, . . Boston;
Dr. Edw. H. Clarke, . . . Boston.

And they were elected.

The Chair also nominated Dr. Benjamin Cutter, of Woburn, a member of the Committee on Scientific Communications, vice Dr. Geo. Choate, resigned, and he was chosen.

The Chair stated that the following Fellows had been appointed a Committee to petition the Legislature in aid of the petition of the Boston Sanitary Association for the estab-

lishment of a State Sanitary Commission, viz.:—Drs. J. C. Dalton, H. I. Bowditch, G. C. Shattuck, M. Wyman and H. G. Clark.

The Meeting dissolved.

JOHN B. ALLEY,
Recording Secretary.

ANNUAL MEETING, MAY 27, 1862.

The Annual Meeting of the Councillors of the Massachusetts Medical Society was held in their room, No. 12 Temple Place, Boston, on Tuesday evening, May 27th, 1862, at 7½ o'clock.

The following Councillors were present:—

Barnstable.
E. W. Carpenter.

Berkshire.
H. H. Childs,
J. L. Miller.

Bristol North.
C. Howe,
T. Phelps,
I. Sampson.

Bristol South.
G. Atwood,
F. Hooper,
A. Mackie.

Essex North.
H. C. Perkins.

Essex South.
E. Hunt.

Middlesex North.
E. Huntington,
C. A. Savery.

Middlesex South.
C. H. Allen,
J. Bartlett,
H. Holmes,
E. Hoyt,
J. Pratt,
J. B. Taylor.

Middlesex East.
B. Cutter,
W. Ingalls,
H. Wakefield.

Norfolk.
B. E. Cotting,
E. Jarvis,
B. Mann.

Suffolk.
J. Ayer,
G. Bartlett,
S. Cabot, Jr.
W. E. Coale,
P. M. Crane,
J. C. Dalton,
H. Dyer,
J. Flint,
J. B. Forsyth,
A. A. Gould,
G. Hayward,
G. Hayward, Jr.
J. Homans,
J. B. S. Jackson,
J. Jeffries,
W. W. Morland,
S. Morrill,
G. C. Shattuck,
D. H. Storer,
C. E. Ware,
J. M. Warren,
A. A. Watson.

Worcester.
L. E. Marsh,
J. G. Metcalf,
W. Workman.

Worcester North.
T. R. Boutelle,
D. Parker.

The President, Dr. JOHN HOMANS, in the Chair.

[In consequence of the death of the Recording Secretary, the duties of the office devolved upon the Corresponding Secretary.—By-Law XXVI.]

The records of the previous meeting were read and accepted.

The Corresponding Secretary reported that Dr. Roeser, of Athens, Greece, had accepted Honorary Membership. He also read the names of Fellows admitted and of Fellows deceased during the year.

The Treasurer read his Annual Report, and the President stated that, in the absence of the members of the Auditing Committee, he had audited the account and found it properly kept and duly vouched; whereupon the Report was accepted.

The Committee on Registration reported that the following Fellows, having passed the age of sixty years, and having paid all dues, had requested to become Retired Members, viz.:—

Dr. Edward G. Ufford, . . West Springfield;
" J. V. C. Smith, . . . Boston;
" Alvah Godding, . . . Winchendon;
" Augustus Whiting, . . Charlestown;

That Dr. Thomas M. Brewer, having retired from the practice of Medicine, desired to resign Fellowship—and that

Dr. Henry Russell, who resigned Fellowship in 1848, on leaving the State, having returned to practice in New Bedford, desires to be restored to Fellowship—and

They recommend that these several requests be granted.

Voted, "That the requests be granted as recommended by the Committee."

The Treasurer read a list of those delinquent in paying assessments.

On motion, the President appointed a Committee of one from each District to nominate a list of candidates for the offices of the Society for the coming year.

Dr. Homans declined re-election.

This Committee reported as follows:—

Dr. JOSIAH BARTLETT, Concord,	*President.*
" EBENEZER ALDEN, Randolph,	*Vice President.*
" AUGUSTUS A. GOULD, Boston,	*Treasurer.*
" BENJAMIN E. COTTING, Roxbury,	*Cor. Secretary.*
" FRANCIS MINOT, Boston,	*Rec. Secretary.*
" WILLIAM E. COALE, Boston,	*Librarian.*

These several nominees were thereupon elected by ballot.

In response to an invitation from Drs. J. L. Miller and H. H. Childs, in behalf of the Berkshire Medical Society, it was

Voted, "That the next Annual Meeting be held in Pittsfield, on the third Wednesday of June, 1863."

The Nominating Committee were requested to nominate an Orator, Anniversary Chairman and Committee of Arrangements. They reported for Orator, Dr. Morrill Wyman, of Cambridge, and for Anniversary Chairman, Dr. Timothy Childs, of Pittsfield; and they were appointed by the Council.

Voted, "That the appointment of Committee of Arrangements be referred to the Berkshire District Medical Society, with powers."

On motion of Dr. John Jeffries, of Boston, it was

Voted, "That the Council recommend to the Society to pass the following Preamble and Resolutions:—

"Whereas, a number of the members of the Massachusetts Medical Society, actuated by deep loyalty and high patriotic motives, have, in their individual capacity, voluntarily, or at official call, rendered their professional services to the military and naval forces of the Union, it is therefore

Resolved, "That the Massachusetts Medical Society hereby expresses its cordial approbation of this act of some of its members, its deep sympathy with the spirit which has sent them forth, and offers to them its sincere thanks for this expression of loyalty, of love of country, of humanity, and of medical integrity which so truly represents the feelings, the wishes, and the ardent patriotism of the Medical Profession of this Commonwealth.

Resolved, "That the Massachusetts Medical Society will, in its corporated capacity, render to the Commonwealth and to the United States of America, every aid within its power for the maintenance of the Government, the integrity of the Constitution, the establishment of the laws, and for the entire suppression of this unnecessary and iniquitous, although gigantic rebellion."

The following was received from the Rhode Island Medical Society:—

"PROVIDENCE, May 24, 1862.

"At a regular meeting, Dec. 18, 1861, the following vote was unanimously passed:—

"*Whereas*, It is desirable to cultivate friendly relations with other State Medical Societies, particularly those of New England—therefore

"*Resolved*, That this Society do appoint, at each semi-annual meeting, two delegates for each of the New England States, who shall be desired to attend the annual meetings of the Medical Societies of these States, as accredited.

"Under this Resolution, Joseph Mauran, M.D., and Sylvanus Clapp, M.D., have been appointed delegates to attend the annual meeting of the Massachusetts Medical Society, for the year 1862.

"Attest, CHARLES W. PARSONS, *President*.

"B. LINCOLN RAY, *Rec. Sec.*"

Voted, "That the Corresponding Secretary acknowledge the receipt of the letter, and inform the Rhode Island Society of our readiness to reciprocate; that their delegates will be warmly welcomed to the meetings of our Society, and that delegates will be appointed from the Massachusetts Society to attend the meeting in Providence.

Voted, "That the President be empowered to appoint two delegates to attend the annual meetings of each of the State Medical Societies in New England."

The President appointed Drs. Foster Hooper of Fall River, and D. H. Storer of Boston, to attend the Rhode Island Society; Drs. E. Hoyt of Framingham, and C. A. Savery of Lowell, to attend the New Hampshire Society; Drs. A. A. Gould of Boston, and B. E. Cotting of Roxbury, to attend the Vermont Society; and Drs. George H. Nichols and A. A. Gould of Boston, to attend the Maine Society.

The following Standing Committees were appointed:—

Committee on Publications.

Drs. C. G. Putnam, G. C. Shattuck, W. W. Morland.

On Membership and Resignations.

Drs. A. A. Gould, S. Morrill, J. C. Ayer.

On Finance.

Drs. S. D. Townsend, John Ware, J. C. Dalton.

On motion, it was unanimously

Resolved, "That the Massachusetts Medical Society, gratefully appreciating the faithfulness, energy and success with which Dr. John Homans has presided over its doings, and managed its affairs; the zeal with which he has maintained its dignity and interests and strengthened its influence, and especially his generous friendship in lending his aid to the Treasury in time of need—now offer him their hearty thanks for his official and personal services, and wish him every happiness in his retirement from office."

At 10, P. M., adjourned.

B. E. COTTING,
Recording Secretary, Ex off.

PROCEEDINGS OF THE SOCIETY.

ANNUAL MEETING,

MAY 28, 1862.

The Annual Meeting of the Massachusetts Medical Society was held at Mechanics' Hall, Boston, on Wednesday, May 28th, 1862, at 1 o'clock, A.M.

The President, Dr. JOSIAH BARTLETT, of Concord, in the chair.

The Secretary laid before the Society the records of the proceedings of the Councillors for the year preceding, and read the record of the last meeting of the Society.

The Secretary then reported the names of those who had become Fellows during the year, and also of Fellows deceased since the last anniversary meeting.

Fellows admitted during the Year.

Samuel W. Abbott, U. S. N. .	Woburn.
William G. Allen, . . .	Mansfield.
R. Foster Andrews, . .	Gardner.
William S. Brown, . . .	South Reading.
Sidney H. Carney, . . .	Boston.
Jonathan Carr, . . .	Great Barrington.
Charles G. Corey, . . .	Royalston.
Joseph W. Cushing, . .	Boston.
Francis F. Dale, . . .	Reading.
Howard F. Damon, . . .	Boston.
Charles E. Davis, . . .	Ashby.
Ebenezer A. Dean, . . .	Montague.

Thomas H. Dearing,	South Scituate.
Hasket Derby,	Boston.
Thomas M. Drummond,	Boston.
Ezra Dyer,	Philadelphia, Penn.
Robert T. Edes,	Dorchester.
Samuel W. Fletcher,	Pepperell.
John L. Fox, U. S. N.	Chelsea.
Richard J. P. Goodwin,	Boston.
William Gray,	Tewksbury.
John M. Harlow,	Woburn.
Charles H. Haskell,	South Abington.
Dixi C. Hoyt,	Milford.
Friend D. Lord,	West Dedham.
Edwin Manley,	North Easton.
H. Hedge Mitchell,	Bridgewater.
John P. Ordway,	Boston.
Henry Pratt,	Lanesboro'.
Joseph Ray,	Boston.
Thaddeus P. Robinson,	Newton Centre.
Charles C. Street,	Boston.
Charles C. Tower,	South Abington.
Lemuel M. Wells,	Marblehead.

The Treasurer read his Annual Report, and the Secretary read the Auditor's Report; both of which were accepted, and ordered to be placed on file.

The Secretary reported the doings of the Councillors on the receipt of the Communication from the Rhode Island State Medical Society relative to cultivating friendly relations between State Societies, the appointment of delegates, &c., and introduced to the Society the delegates present, viz.:—

Dr. Sylvanus Clapp, of Rhode Island Med. Society.
Dr. Samuel Webber, of New Hampshire Med. Society.

On motion of Dr. Jarvis, of Dorchester, the vote of the Councillors on the retirement of Dr. John Homans, was unanimously endorsed by the Society.—(See p. 39, Records of Councillors.)

On motion of Dr. J. Jeffries, of Boston, the Resolutions offered by him to the Councillors, and by them recommended

to the Society for adoption, were taken up, and after debate, they were adopted.—(See p. 37, Councillors' Records.)

Dr. B. Cutter, of Woburn, on behalf of his son, Dr. E. Cutter, read a partial report on Zymotic Diseases in Middlesex East District; Dr. Chapin, of Winchester, read a paper on Keroselene; Dr. Ruppaner, one on Subcutaneous Injections for relief of Neuralgia; Dr. Shattuck, on Fever; and Dr. H. J. Bigelow, on Dislocations of the Hip-joint—which were severally referred to the Committee on Publications.

At 1 o'clock, P.M., Dr. Henry I. Bowditch, of Boston, delivered the Annual Discourse, on "The Topographical Distribution of Consumption in New England, or Locality as a Cause of Consumption in Massachusetts."

On motion of Dr. H. P. Wakefield, of Reading, after a free discussion, in which Dr. Bowditch strenuously opposed its passage, on the general grounds that it was contrary to the spirit of the resolutions passed by the Society Oct. 3, 1860 (see printed proceedings, vol. vi., p. 12), and likely to become a mere form, the following resolution was adopted:

Resolved, That the cordial thanks of the Society be, and are hereby tendered to Dr. Henry I. Bowditch, for his able, interesting, scientific and practical Discourse."

The meeting was then adjourned *sine die*.

FRANCIS MINOT,
Recording Secretary.

Dr. Massachusetts Medical Society in Account with Augustus A. Gould, Treasurer. Cr.

Received at Annual Meeting,			$474.00
Sundry Assessments,			469.00
From Districts.	Barnstable,	$27.00	
	Berkshire,	147.00	
	Bristol South,	75.00	
	Essex North,	144.00	
	Essex South,	15.00	
	Franklin,	51.00	
	Hampden,	33.00	
	Hampshire,	45.00	
	Middlesex East,	69.00	
	Middlesex North,	72.00	
	Middlesex South,	75.00	
	Norfolk,	75.00	
	Suffolk,	174.00	
			1,002.00
Interest—Permanent Fund,		618.92	
Shattuck Legacy,		504.18	
Phillips Legacy,		609.00	
			1,732.10
Rents and Taxes,			602.89
Recording Secretary—Diplomas			15.00
Subscribers to Dr. Read's Book—in part,			500.00
Balance due Treasurer,			1,923.39
Errors Excepted.			$6,718.38

AUGUSTUS A. GOULD, Treas.

Balance due Treasurer from last Account,			$1,136.05
Refunded to Districts—Barnstable,		8.25	
Berkshire,		55.25	
Bristol South,		18.75	
Essex North,		43.50	
Essex South,		5.25	
Franklin,		12.75	
Hampden,		11.25	
Hampshire,		11.25	
Middlesex East,		18.75	
Middlesex North,		20.25	
Middlesex South,		54.00	
Norfolk,		35.25	
Suffolk,		87.34	
			387.84
District Treasurers' Commissions,			49.05
Publications,			2,794.85
Rent, Taxes, and care of Rooms,			637.47
Notes Payable—J. Homans's, &c.			1,039.30
Interest and Discount,			218.95
Profit and Loss—Counterfeit and uncurrent Bills,			5.20
Refunded—Jackson's Letter returned,			2.50
Treasurer's Salary,			300.00
Incidentals,			146.57
			$6,718.38

May 27, 1862. Balance to new Account, $1,923.39.

Officers of the Massachusetts Medical Society.

1862 — 63.

Chosen May 27, 1862.

JOSIAH BARTLETT, . . . Concord, . . . President.
EBENEZER ALDEN, . . . Randolph, . . Vice-President.
BENJAMIN E. COTTING, Roxbury, . . . Cor. Secretary.
FRANCIS MINOT, ... Boston, ... Rec. Secretary.
WILLIAM E. COALE, . . Boston, ... Librarian.
AUGUSTUS A. GOULD, . Boston, ... Treasurer.

Vice-Presidents (Ex-Officiis.)

[Arranged according to Seniority.]

Paul L. Nichols.	William W. Comstock.
D. H. Storer.	Horace P. Wakefield.
Augustus Torrey.	C. P. Fiske.
A. LeBaron Monroe.	A. Godding.
Selden Jennings.	Charles A. Savory.
W. W. Wellington.	John R. Bronson.
Edward Barton.	James Dunlap.
Kendall Flint.	John M. Smith.

E. G. Pierce.

Councillors.

Barnstable. — Drs. Elijah W. Carpenter, Nath'l B. Danforth, Chatham; George W. Doane, Hyannis; Samuel H. Gould, Brewster.

BERKSHIRE. — Drs. Henry H. Childs, Pittsfield; J. Leland Miller, Pittsfield; E. B. Root, W. Stockbridge; Henry L. Sabin, Williamstown.

BRISTOL NORTH. — Drs. Benoni Carpenter, Attleboro'; Chas. How, Taunton; Thaddeus Phelps, Attleboro'; Ira Sampson, Dighton.

BRISTOL SOUTH.—Drs. George Atwood, Fairhaven; Lyman Bartlett, New Bedford; Joseph Haskell, Rochester; Foster Hooper, Fall River; Andrew Mackie, New Bedford.

ESSEX NORTH.—Drs. Josiah Atkinson, Newburyport; John Crowell, Jr., Haverhill; Stephen Huse, Methuen; Henry C. Perkins, Newburyport; Francis J. Stevens, Haverhill.

ESSEX SOUTH.—Drs. Benjamin Cox, Jr., Salem; Benjamin Haskell, Rockport; Ebenezer Hunt, Danvers; James M. Nye, Lynn; Edw. B. Peirson, Salem; Augustus Torrey, Beverly.

FRANKLIN.—Drs. Stephen Bates, Charlemont; C. L. Knowlton, Ashfield; Elijah Stratton, Northfield; N. G. Trow, Sunderland.

HAMPDEN.—Drs. William G. Breck, Springfield; S. L. Chapman, Longmeadow; A. S. McLean, Springfield.

HAMPSHIRE.—Drs. William Lester, South Hadley; Lebbeus E. Marsh, Granby; Daniel Thompson, Northampton.

MIDDLESEX NORTH. — Drs. John C. Bartlett, Chelmsford; Elisha Huntington, Lowell; Austin Marsh, Carlisle; Edw. A. Perkins, Tyngsboro'; Charles A. Savory, Lowell.

MIDDLESEX EAST.—Drs. W. H. Heath, Stoneham; William Ingalls, Winchester; Joseph D. Mansfield, South Reading; Horace P. Wakefield, Reading

MIDDLESEX SOUTH. — Drs. C. H. Allen, Cambridgeport; A. B. Bancroft, Charlestown; JOSIAH BARTLETT, *President*, Concord; Henry Cowles, Saxonville; Enos Hoyt, Framingham; O. E. Hunt, Weston; F. R. C. Kittredge, Waltham; A. C. Livermore, Stow; Augustus Mason, Brighton; Jefferson Pratt, Hopkinton; J. B. Taylor, East Cambridge.

NORFOLK.—Drs. BENJAMIN E. COTTING, Roxbury, *Cor. Secretary*; Benjamin Cushing, Dorchester; Joseph G. S. Hitchcock, Foxboro'; Christopher C. Holmes, Milton; Edward Jarvis, Dorchester; Benjamin Mann, Roxbury; Josiah Noyes, Needham; Ebenezer Stone, Walpole.

PLYMOUTH.—Drs. Asa Millet, Abington; Samuel A. Orr, East Bridgewater; James Wilde, Duxbury.

SUFFOLK. — J. B. Alley, J. Ayer, G. Bartlett, J. Bigelow, H. J. Bigelow, H. I. Bowditch, S. Cabot, Jr., H. G. Clark, W. E. COALE, *Librarian*, Boston; P. M. Crane, East Boston; W. J. Dale, J. C. Dalton, H. Dyer. J. Flint, Boston; J. B. Forsyth, Chelsea; C. Gordon, A. A. GOULD, *Treasurer*, A. B. Hall, G. Hayward, G. Hayward, Jr., J. Homans, J. B. S. Jackson, J. Jeffries, W. W. Morland, S. Morrill, E. Palmer, C. G. Putnam, G. C. Shattuck, D. H. Storer, C. E. Ware, J. M. Warren, A. A. Watson, Boston.

WORCESTER.—Drs. Rowse R. Clark, Whitinsville; Henry A. Jewett, Northboro'; Ephraim Lovell, West Boylston; John G. Metcalf, Mendon; Oramel Martin, Joseph Sargent, William Workman, Worcester; Edward M. Wheeler, Spencer.

WORCESTER NORTH.—Drs. Thomas R. Boutelle, Fitchburg; Alvah Godding, Winchendon; Alfred Hitchcock, Fitchburg; David Parker, Gardner.

Censors.

BARNSTABLE. — Drs. Elisha W. Carpenter, Nathaniel B. Danforth, Chatham; Samuel H. Gould, Brewster; George Shove, Yarmouth Port; John M. Smith, Barnstable.

BERKSHIRE. — Drs. Lucius S. Adams, Stockbridge; Frank A. Cady, Timothy Childs, Pittsfield; C. C. Holcomb, Lee.

BRISTOL NORTH. — Drs. John H. Bronson, Attleboro'; John B. Chace, Henry B. Hubbard, Taunton.

BRISTOL SOUTH. — Francis D. Bartlett, South Dartmouth; Perez F. Doggett, Wareham; Jerome Dwelley, Fall River; William A. Gordon, New Bedford; John H. Mackie, *Secretary*, New Bedford.

ESSEX NORTH. — Drs. James C. Howe, Oliver S. Lovejoy, Haverhill; Seneca Sargent, Lawrence; Jeremiah H. Sawyer, Newburyport; Jeremiah Spofford, Groveland.

ESSEX SOUTH. — Drs. George A. Perkins, H. Osgood Stone, and Henry Wheatland, Salem.

FRANKLIN. — Drs. David Rice, Leverett; Josiah Trow, Buckland; Milo Wilson, Shelburne Falls.

HAMPDEN. — Drs. Thomas L. Chapman, Longmeadow; Alfred Lambert, Henry R. Vaille, Springfield.

HAMPSHIRE. — Drs. Francis C. Greene, Austin W. Thompson, Northampton; George F. Thompson, Belchertown.

MIDDLESEX NORTH. — Jonathan Brown, Tewksbury; Levi Howard, Chelmsford; Elisha Huntington, Harlin Pillsbury, Charles A. Savory, Lowell.

MIDDLESEX EAST. — Drs. Alonzo Chapin, Winchester; Ephraim Cutter, *Secretary*, Woburn; Samuel A. Toothaker, Wilmington.

Middlesex South. — Drs. J. Henry Brown, W. Newton; Moses Clarke, East Cambridge; Morrill Wyman, Cambridge.

Norfolk. — Drs. Ebenezer P. Burgess, Dedham; William C. B. Fifield, Dorchester; D. Wayland Jones, Medfield; Joel Seaverns, Jamaica Plain; Simeon Tucker, Stoughton.

Plymouth. — Drs. Josiah H. Hammond, Plympton; Benjamin Hubbard, Plymouth; James F. Richards, North Bridgewater.

Suffolk. — Drs. J. N. Borland, *Secretary*, C. D. Homans, F. Minot, H. W. Williams, Boston.

Worcester. — Drs. Henry Clarke, *Secretary*, Thomas H. Gage, Rufus Woodward, Worcester; Frederick A. Sawyer, Sterling, M. D. Southwick, Blackstone.

Worcester North. — Alfred Miller, Fitchburg; James P. Lynde, Athol; James O. Parker, Shirley; Isaac P. Willis, Royalston; C. C. Field, Leominster.

Commissioners of Trials.

Barnstable	Sam'l H. Gould	Brewster.
Berkshire	Henry H. Childs	Pittsfield.
Bristol North . . .	Thaddeus Phelps	Attleboro'.
Bristol South . . .	Andrew Mackie	New Bedford.
Essex North . . .	Jeremiah Spofford . . .	Groveland.
Essex South . . .	George Choate	Salem.
Franklin	C. M. Duncan	Shelburne.
Hampden	Nathan Adams	Springfield.
Hampshire	Samuel A. Fisk	Northampton.

PLYMOUTH.—Dr. Paul L. Nichols, Kingston, *President;* Dr. Winslow Warren, Plymouth, *Vice-President;* Dr. Henry N. Jones, Kingston, *Secretary and Treasurer;* Dr. Francis Collamore, Pembroke, *Librarian.*

SUFFOLK.—Dr. D. H. Storer, Boston, *President;* Dr. S. L. Abbot, Boston, *Vice-President;* Dr. J. C. White, Boston, *Secretary;* Dr. F. Minot, Boston, *Treasurer;* Dr. Calvin Ellis, Boston, *Librarian.*

WORCESTER.—Dr. C. P. Fiske, Fiskedale, *President;* Dr. Joseph Sargent, Worcester, *Vice-President;* Dr. Henry C. Prentiss, Worcester, *Secretary and Librarian;* Dr. Thomas H. Gage, Worcester, *Treasurer.*

WORCESTER NORTH.—Dr. A. Godding, Winchendon, *President;* Dr. Thomas R. Boutelle, Fitchburg, *Vice-President and Treasurer;* Dr. George D. Colony, Fitchburg, *Secretary and Librarian.*

SUPPLEMENT TO THE CATALOGUE.

LIST OF THOSE WHO HAVE BECOME FELLOWS SINCE THE PRINTING OF THE CATALOGUE IN 1854.

☞ Fellows whose *names* are not written IN FULL in the Catalogue, will please send them to the Recording Secretary, FRANCIS MINOT, 144 Charles Street, Boston, forthwith, that they may be inserted in the new edition.

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1855	Abbott, Ezra	Canton			
1862	Abbott, Samuel Warren	Woburn			
1855	Adams, Zabdiel B	Boston			
1860	Allen, A. N	Pittsfield			
1859	Allen, Justin	Topsfield			
1862	Allen, William George	Mansfield			
1860	Ames, Joseph S	Holden			
1861	Andrews, Robert	Orange			
1862	Andrews, R. Foster	Gardner			
1861	Arnold, George J	Roxbury			
1858	Aten, Henry F	Dedham			
1854	Barker, Bowen	S. Hanson			
1860	Barker, John W	Easthampton			
1860	Barnes, Edward F	Marlborough			
1855	Barnes, John	Milford			
1856	Barnes, Norman S	Pittsfield			
1861	Barrett, Edward B	Northampton			
1858	Barrett, William M	Fitchburg			
1861	Barstow, Noyes	Bernardston			
1855	Bartlett, Ezra	Concord, N. H.			
1861	Bates, Joseph N	Worcester			
1856	Beals, H. H.	Pittsfield			
1858	Bement, John W	Belchertown			
1857	Bemis, Merrick	Worcester			
1855	Bemis, Nathaniel O.	Hubbardston			
1857	Bennett, A. W.	Uxbridge			
1855	Blake, John E	Middletown, Ct			
1861	Blake, John G.	Boston			
1859	Both, Carl	Boston			
1859	Boynton, Royal B	Townsend			
1855	Brackett, Wm. T. S	Olneyville, R. I			
1860	Breed, B. B	Lynn			
1858	Brewster, John M., Jr	Palmer Depot			
1856	Briggs, Charles E	Boston			
1857	Brink, Edwin	Pittsfield			
1861	Brown, Francis Henry	Cambridge			
1855	Brown, J. Henry	West Newton			
1857	Brown, Orlando	Wrentham			

Admitted.	Name	Residence.	Retired.	Died.	Age
1862	Brown, Wm. Symington ..	South Reading.....			
1860	Bryant, Albert H.....	Natick.....			
1859	Burleigh, William H.....	Lawrence			
1859	Burge, William B.	Taunton			
1855	*Burgess, G. M.	Blackstone		1859	42
1861	Burnett, Elisha G.	Webster			
1856	Bushnell, William.....	Boston.....			
1861	Buttrick, James T.....	Wilton, N. H.....			
1858	Campbell, Benjamin	East Boston			
1862	Carney, Sidney H.	Boston.....			
1861	Cass, Jonathan	Great Barrington...			
1858	Chace, John B.....	Taunton			
1858	Chamberlain, Eben. N. ...	Millbury			
1860	Chapin, Horace	Fairmount			
1856	Chase, Irah E.	Haverhill			
1858	Chase, Preston M.....	Danvers.....			
1858	Cheever, David W.....	Boston.....			
1855	Clark, Henry.....	Worcester.....			
1858	Coggswell, George B.....	Bridgewater			
1859	Collamore, George A.....	Toledo, Ohio			
1855	Collins, Clarkson T.....	Great Barrington...			
1855	Cook, McLaurin F.....	Boston.....			
1856	Coolidge, James.....	Orange			
1862	Corey, Charles G.	Royalston.....			
1857	Cowdray, Harris.....	Acton			
1856	Cowles, H.....	Saxonville.....			
1859	Crehore, Charles F.....	Boston.....			
1856	Crowell, John, Jr.....	Haverhill.....			
1857	Crozier, Arthur T.....	Maysville, Ark.....			
1861	Curtis, Hall	Boston.....			
1862	Cushing, Joseph Whitney..	Boston.....			
1856	Cutter, Ephraim.....	Woburn			
1862	Damon, Howard Franklin.	Boston.....			
1862	Davis, Charles E.....	Ashby			
1860	Dean, John.....	Boston.....			
1861	Deane, Ebenezer A.	Montague			
1862	Dearing, Thomas Haven...	S. Scituate			
1859	Delano Marcus F.	Sterling.....			
1862	Derby, Hasket	Boston.....			
1860	Dewolf, Oscar C.....	Pittsfield.....			
1861	Dole, Francis F.....	Reading.....			
1860	Dow, John O.....	Harvard			
1858	Draper, Joseph.....	Brattleboro', Vt....			
1857	Drew, David F.....	Lynn.....			
1862	Drummond, Tho. Mengies.	Boston.....			
1855	Durgin, Elijah S.	Boston.....			
1862	Dyer, Ezra.....	Philadelphia, Pa....			
1861	Eayrs, Charles G. A.	Lowell.....			
1861	Edes, Robert Thaxter.....	Dorchester			
1855	Fabyan, George.....	Boston.....			
1861	Fearing, Benjamin, Jr.....	Wareham			
1858	Ferguson, Hugh	South Boston.....			
1858	Fifield, William C. B.	Dorchester			
1862	Fisher, Theodore Willis...	——.....			
1855	Fiske, Daniel S.....	East Brookfield....			
1855	Flagg, Samuel B.....	Boston.....			
1861	Fletcher, Samuel William.	Pepperell.....			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1856	Fobes, Joseph B.	Hanover			
1856	Forsaith, Francis F.	Weymouth			
1859	Foss, Stephen	Boston			
1857	Foster, James M.	Springfield			
1862	Fox, John L.	U. S. N.			
1860	French, John O.	Hanover			
1860	Fuller, Henry H.	Lancaster			
1856	Gage, Daniel Parker.	Lowell			
1856	Gale, George F.	Amherst			
1857	Galloup, John S.	Medfield			
1858	Garland, George W.	Lawrence			
1859	Godding, William W.	Fitchburg			
1859	Goodell, Jonathan W.	Greenwich			
1861	Goodwin, Richard J. P.	Boston			
1859	Gould, Joseph F.	South Boston			
1859	Gould, Joshua B.	Templeton			
1861	Gray, Asa F.	Rowley			
1861	Gray, William	Tewksbury			
1858	Green, John	Boston			
1860	Green, Samuel A.	Boston			
1858	Griggs, Samuel	Westboro'			
1858	Griggs, Thomas T.	Grafton			
1859	Ham, Abner	Boston			
1861	Harlow, John Martin.	Woburn			
1859	Hartley, James W.	Fall River			
1861	Hartnett, Maurice K.	Boston			
1860	Harwood, Harry J.	Lowell			
1861	Haskell, Charles H.	S. Abington			
1856	Hatch, Horace	Brookline			
1855	Haven, Samuel F., Jr.	Worcester			
1859	Hay Gustavus	Boston			
1858	Hayward, John McLean	Boston			
1857	Hayward, Nathan, Jr.	Roxbury			
1858	Head, George E., Jr.	Boston			
1859	Heard, J. Theodore	Boston			
1855	Henderson, Jophanus.	Somerville			
1856	Hill, Edward L.	Williamsburg			
1858	Hill, Gardner C.	Warwick			
1856	*Hill, James S.	Sacramento, Cal.		1857	32
1862	Holbrook Silas P.	E. Douglass			
1855	Holcomb, Clifford C	Lee			
1855	Holman, Silas A.	Taunton			
1859	Holmes, A. R.	New Bedford			
1858	Holmes, H. M.	South Adams			
1855	Hooker, Anson P.	E. Cambridge			
1859	Hooper, Frederick H.	New Bedford			
1860	Hoskins, Thomas H.	Boston			
1856	Hosmer Alfred	Watertown			
1856	How, James C.	Haverhill			
1857	Howe, George M.	Harvard			
1862	Hoyt, Dixi Crosby	Milford			
1861	Hubbard, Henry B.	Taunton			
1860	Hubon, Peter E.	Worcester			
1859	Hurd, Samuel H.	Charlestown			
1856	Hurd, Yorick C.	Amesbury			
1858	Hutchins, John W.	Newton			
1856	Hyde, George S.	Boston			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1857	Janes, Henry	Waterbury, Vt.			
1858	Jeffries, B. Joy	Boston			
1854	Jenks, Thomas L.	Boston			
1856	Jewett, Charles C.	Holliston			
1861	Jewett, Fayette	———			
1856	Jones, D. Wayland	Medfield			
1859	Jordan, Charles	South Reading			
1855	Keep, Samuel H.	Boston			
1861	Kemp, H. E.	N. Prescott			
1855	Kendall, Albert A.	Newton L. Falls			
1860	Kidder, Moses W.	Lowell			
1861	Kittredge, F. R. C.	Waltham			
1855	*Knight, Ebenezer	Brimfield		1857	68
1856	Kob, Charles F.	Kansas			
1856	Lamson, John A.	Boston			
1857	*Lane, William N.	Charlestown		1862	42
1856	Leach, William	Holmes's Hole			
1861	Lewis, F. B. A.	Watertown, N. Y.			
1855	Lincoln, Francis M.	Boston			
1859	Lincoln, George C.	South Malden			
1859	Livermore, Abel C.	Stow			
1861	Lord, Friend Drake	Sterling			
1856	Lovejoy, Oliver S.	Haverhill			
1856	*Lynch, Thomas	South Boston		1857	25
1855	Lynde, James P.	Athol			
1858	Lyons, Charles T.	Coleraine			
1862	Manley, Edwin	N. Easton			
1859	Mansfield, John R.	New York			
1859	Manning, J. H.	Pittsfield			
1859	Marrisul, Felix V.	Fall River			
1858	Marsh, Lebbeus Eaton	Granby			
1855	Mason, William	Charlestown			
1860	Maunsell, G. N.	Harwich			
1856	McCollister, John Q. A.	South Groton			
1855	McLean, A. S.	Springfield			
1861	Meacham, Franklin	W. Stockbridge			
1861	Mead, M. S.	Northfield			
1859	Melcher, Samuel H.	Potosi, Mo.			
1859	Mignault, Deodat	Lowell			
1860	Mills, C. D.	Pittsfield			
1855	Miner, D. W.	Ware			
1861	Mitchell, H. Hedge	Bridgewater			
1861	Moffatt, George	Boston			
1861	Moore, James M.	South Groton			
1854	Morong, Edward P.	Cahawba, Ala.			
1854	Morris, William B.	Charlestown			
1854	Morse, James R.	N. Cambridge			
1859	Murphy Joseph	Taunton			
1856	Neilson W.	Salem			
1860	Nichols, George H.	Boston			
1856	Nichols, George K.	Sandisfield			
1859	Nichols, John T. G.	Cambridge			
1855	Nichols, Jonathan	Harvard			
1857	Nihill, John L.	Boston			
1857	Niles, John N.	Boston			
1861	O'Connell, Patrick A.	Boston			
1855	Oliver, Henry K.	Boston			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1858	Orcutt, Almon M.	Hardwick			
1862	Ordway, John Pond.	Boston			
1856	Osgood, William	Boston			
1855	Otis, George A.	Springfield			
1855	Page, Calvin G.	Boston			
1856	Partridge, Louis E	Natick			
1861	Pattee, Asa F.	W. Amesbury			
1861	Pease, Loren H.	Amherst			
1856	Perkins, D. C.	S. Danvers			
1855	*Perkins, John P.	Great Barrington		1856	
1860	Person, John W.	Lowell			
1859	Pierce, George W.	Leominster			
1858	Pike, Horace G.	Boston			
1859	Pillsbury, Harlin H.	W. Townsend			
1861	Pillsbury, John M.	Lawrence			
1859	Pinkerton, Thomas H.	Virginia City, U. T.			
1861	Plympton, Ashael A.	Shirley			
1861	Plympton, H. S.	New York			
1857	Potter, Albert	Burrillville, R. I.			
1858	Porter, Royal N.	Deerfield			
1859	Pouliot, Francis E. W.	Quebec, C. E.			
1861	Pratt, Henry	Lanesboro'			
1858	Prentiss, Henry Conant.	Northampton			
1861	Prince, J. P.	Lynn			
1860	Prius, Peter	Lowell			
1859	Proctor, William B.	Lowell			
1860	Provan, Robert	Boston			
1857	Ranny, Mark	Somerville			
1855	Rice, I. Marcus	Worcester			
1861	Rice, William E.	Boston			
1861	Richards, James F.	Campello			
1855	Richardson, Horace	Boston			
1856	Richardson, John H.	Chesterfield			
1861	Ricketson, Arthur	New Bedford			
1858	Robinson, Albert B.	Holden			
1859	Robinson, J. Henry	Southboro'			
1859	Robinson, John L.	Wenham			
1860	Robinson, Marcus Tullius.	Jamaica Plain			
1862	Robinson, Thad. Pulaski.	Newton Centre			
1858	Rockwood, Henry	West Medway			
1855	Rogers, Seth	Worcester			
1858	Root, E. B.	W. Stockbridge			
1862	Roy, Joseph	Boston			
1856	Rublee, Chauncy M.	Montpelier, Vt.			
1858	Ruppaner, Antoine	Boston			
1860	Ryan, John	Charlestown			
1858	Sargent, George W.	Lawrence			
1857	Sargent, Lucius M., Jr.	Boston			
1859	Saville, Henry M.	Quincy			
1859	Sawyer, Edward J.	Gardner			
1856	Sawyer, Frederick A.	Sterling			
1860	Sawyer, John W.	Madison, Wis.			
1858	Sawyer, Jeremiah H.	Newburyport			
1861	Seyffarth, Edmund.	Lawrence			
1860	Shaw, Henry Lyman.	Boston			
1860	Sheldon, L. R.	Boston			
1861	Shipley, George T.	Boston			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1856	Simmons, Gustavus L.	Sacramento, Cal.			
1858	Sinclair, Alexander D.	Boston			
1854	Smith, Abner M.	Pittsfield			
1856	Smith, Andrew M.	Williamstown			
1855	*Smith, Albert D.	Holden		1858	36
1856	Smith, G. O.	Haverhill			
1858	Smith, Jerome C.	New York			
1859	Smyth, James	Boston			
1858	Soule, Horatio S.	Winthrop			
1861	Spaulding, Reuben	Hatfield			
1860	Sprague, Francis P.	Boston			
1857	Spring, Charles H.	Boston			
1856	Spring, John	Dublin, Ireland			
1860	Stearns, Henry P.	Hartford, Ct.			
1860	Stearns, John, Jr.	Boston			
1855	Stedman, Charles E.	Dorchester			
1856	*Stetson, A. Everett	Dorchester		1858	32
1859	Stevens, Francis J.	Haverhill			
1861	Stiles, R. Cresson	Pittsfield			
1862	Street, Charles Carroll	Boston			
1858	Strickland, Rial	Enfield, Ct.			
1857	Stuart, Absalom B.	Westhampton			
1861	Stone, Silas E.	Walpole			
1858	Taylor, John D.	Boston			
1858	Temple, Cyrus	Heath			
1857	Temple, Theron	Ashburnham			
1857	Thompson, Austin W.	Northampton			
1861	Thompson, George F.	Belchertown			
1858	Thorndike, William	Beverly			
1857	Tinker, Martin A.	Burnt Hills, N. Y.			
1857	Tjader, Antoun W.	Boston			
1861	Topliff, Charles C.	Lunenburg			
1861	Tower, Charles C.	S. Weymouth			
1859	Towle, Samuel K.	Haverhill			
1857	Tracy, Stephen	Andover			
1855	Trow, Nathaniel G.	Sunderland			
1855	Tucker, George G.	Westfield			
1859	Tuttle, Charles M.	New Bedford			
1859	Tyler, John E.	Somerville			
1855	Tyler, Warren	N. Brookfield			
1858	Underwood, George L.	New York			
1855	Wakefield, Adoniram J.	Hopkinton			
1856	Wakefield, Jonas F.	South Malden			
1855	Walker, Clement A.	South Boston			
1855	Walsh, John D.	Boston			
1858	Walsh, Peter D.	Boston			
1859	Walsh, Walter M.	Boston			
1856	Ware, Robert	Boston			
1860	Warren, Charles	Charlestown			
1861	Warren, Oren	W. Newbury			
1859	Webster, Joseph R.	Milton			
1856	Weeks, Charles M.	Boston			
1858	Wells, Noah	Greenfield			
1856	*Wellman, James R.	Fitchburg		1862	32
1861	West, Joseph O.	Princeton			
1855	Wheatland, Richard H.	Salem			
1857	White, James C.	Boston			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1860	White, Samuel	Springfield			
1860	White, Whitman B.	Curtisville			
1855	Whiting, I. B.	Janesville, Wis.			
1861	Whittemore, George K.	Lowell			
1856	Whittemore, Henry F.	Marblehead			
1861	Willard, Josiah N	Boston			
1861	Williams, A. A. C.	Pittsfield			
1861	Willis, Lemuel Murray	Marblehead			
1858	Windship, George B.	Roxbury			
1855	Winsor, Frederic	Boston			
1860	Witter, John	Brimfield			
1856	Wood, Franklin A.	Lunenburg			
1855	Wood, James A.	Boston			
1855	Woodbury, Elwell	Medford			
1855	Woodward, Rufus	Worcester			
1861	Wright, Eliphalet	Lee			
1855	Yale, John	Ware			

Gentlemen will please notify the Recording Secretary of any errors, omissions or removals.

DIPLOMAS can be obtained by application to the Recording Secretary, enclosing the sum of One Dollar. (See By-Law No. IV.)

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1856	Simmons, Gustavus L.	Sacramento, Cal.			
1858	Sinclair, Alexander D.	Boston			
1854	Smith, Abner M.	Pittsfield			
1856	Smith, Andrew M.	Williamstown			
1855	*Smith, Albert D.	Holden		1858	36
1856	Smith, G. O.	Haverhill			
1858	Smith, Jerome C.	New York			
1859	Smyth, James	Boston			
1858	Soule, Horatio S.	Winthrop			
1861	Spaulding, Reuben	Hatfield			
1860	Sprague, Francis P.	Boston			
1857	Spring, Charles H.	Boston			
1856	Spring, John	Dublin, Ireland			
1860	Stearns, Henry P.	Hartford, Ct.			
1860	Stearns, John, Jr.	Boston			
1855	Stedman, Charles E.	Dorchester			
1856	*Stetson, A. Everett	Dorchester		1858	32
1859	Stevens, Francis J.	Haverhill			
1861	Stiles, R. Cresson	Pittsfield			
1862	Street, Charles Carroll	Boston			
1858	Strickland, Rial	Enfield, Ct.			
1857	Stuart, Absalom B.	Westhampton			
1861	Stone, Silas E.	Walpole			
1858	Taylor, John D.	Boston			
1858	Temple, Cyrus	Heath			
1857	Temple, Theron	Ashburnham			
1857	Thompson, Austin W.	Northampton			
1861	Thompson, George F.	Belchertown			
1858	Thorndike, William	Beverly			
1857	Tinker, Martin A.	Burnt Hills, N. Y.			
1857	Tjader, Antoun W.	Boston			
1861	Topliff, Charles C.	Lunenburg			
1861	Tower, Charles C.	S. Weymouth			
1859	Towle, Samuel K.	Haverhill			
1857	Tracy, Stephen	Andover			
1855	Trow, Nathaniel G.	Sunderland			
1855	Tucker, George G.	Westfield			
1859	Tuttle, Charles M.	New Bedford			
1859	Tyler, John E.	Somerville			
1855	Tyler, Warren	N. Brookfield			
1858	Underwood, George L.	New York			
1855	Wakefield, Adoniram J.	Hopkinton			
1856	Wakefield, Jonas F.	South Malden			
1855	Walker, Clement A.	South Boston			
1855	Walsh, John D.	Boston			
1858	Walsh, Peter D.	Boston			
1859	Walsh, Walter M.	Boston			
1856	Ware, Robert	Boston			
1860	Warren, Charles	Charlestown			
1861	Warren, Oren	W. Newbury			
1859	Webster, Joseph R.	Milton			
1856	Weeks, Charles M.	Boston			
1858	Wells, Noah	Greenfield			
1856	*Wellman, James R.	Fitchburg		1862	32
1861	West, Joseph O.	Princeton			
1855	Wheatland, Richard H.	Salem			
1857	White, James C.	Boston			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1860	White, Samuel	Springfield			
1860	White, Whitman B.	Curtisville			
1855	Whiting, I. B.	Janesville, Wis.			
1861	Whittemore, George K.	Lowell			
1856	Whittemore, Henry F.	Marblehead			
1861	Willard, Josiah N	Boston			
1861	Williams, A. A. C.	Pittsfield			
1861	Willis, Lemuel Murray	Marblehead			
1858	Windship, George B.	Roxbury			
1855	Winsor, Frederic	Boston			
1860	Witter, John	Brimfield			
1856	Wood, Franklin A.	Lunenburg			
1855	Wood, James A.	Boston			
1855	Woodbury, Elwell	Medford			
1855	Woodward, Rufus	Worcester			
1861	Wright, Eliphalet	Lee			
1855	Yale, John	Ware			

Gentlemen will please notify the Recording Secretary of any errors, omissions or removals.

DIPLOMAS can be obtained by application to the Recording Secretary, enclosing the sum of One Dollar. (See By-Law No. IV.)

Massachusetts Medical Society.

PROCEEDINGS OF THE COUNCILLORS.

October Meeting, 1862.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held at the Room in Temple Place, Boston, Wednesday, October 1st, 1862, at 11 o'clock, A.M.

The President, Dr. Josiah Bartlett, in the Chair.

The following Councillors were present:—

Essex North.
Henry C. Perkins.

Essex South.
E. Hunt,
J. M. Nye,
Augustus Torrey.

Middlesex North.
Charles A. Savory.

Middlesex East.
J. D. Mansfield,
H. P. Wakefield.

Middlesex South.
C. H. Allen,
A. B. Bancroft,
J. Bartlett,
Enos Hoyt,
F. R. C. Kittredge,
Augustus Mason,
J. B. Taylor.

Norfolk.
B. E. Cotting,
J. G. S. Hitchcock.

Plymouth.
Asa Millett.

Suffolk.
J. Bigelow,
H. J. Bigelow,
H. I. Bowditch,
S. Cabot, Jr.
H. G. Clark,
W. E. Coale,
P. M. Crane,
J. C. Dalton,
J. B. Forsyth,
A. A. Gould,
A. B. Hall,
George Hayward,
Geo. Hayward, Jr.
J. Homans,
J. B. S. Jackson,
J. Jeffries,
Wm. W. Morland,
E. Palmer,
D. H. Storer,
C. E. Ware,
J. M. Warren,
A. A. Watson.

Worcester.
Oramel Martin.

The Secretary read the record of the preceding meeting, which was accepted.

The Delegates appointed to attend the Annual Meeting of the New Hampshire Medical Society (Drs. E. Hoyt, of Framingham, and C. A. Savory, of Lowell) reported that they were cordially received by that Society, which voted unanimously to reciprocate the attention, and appointed Prof. Albert Smith, of Dartmouth Medical College, and Dr. A. H. Robinson, of Concord, Delegates to attend the next Annual Meeting of the Massachusetts Medical Society.

Dr. Cotting, of Roxbury, one of the Delegates to attend the Annual Meeting of the Vermont Medical Society, made a similar report.

The Committee on Membership and Resignations reported that the following persons, having arrived at the age of sixty, having paid their dues and desired that they might become Retired Members, it is recommended that their request be granted, viz.:—

Dr. Martin Root,	Byfield;
" Noble B. Pickett,	Housatonic;
" Charles W. Wilder,	Fitchburg;
" George Stearns,	Groton;
" Aaron Cornish,	New Bedford;
" Edward B. Moore,	Boston;
" A. D. Dearborn,	Clifton Dale;
" Theodore Kittredge,	Waltham;
" P. W. Leland,	Fall River;
" Daniel Harwood,	Boston;
" Joshua Tucker,	Boston.

The report was accepted, and the recommendation of the Committee was adopted.

Dr. Bowditch, of Boston, presented the following petition:

BOSTON, SEPT. 30th, 1862.

To the Councillors of the Massachusetts Medical Society:

The undersigned, a Committee chosen by the Suffolk District Medical Society, to take some action relative to the

present cruel system of Ambulances of the United States Army, would respectfully call the attention of the Councillors to the gross abuses now existing in that department; and they would earnestly request your body, as the representatives of the Physicians of Massachusetts, to consider the propriety of laying this subject, in a formal manner, before the physicians of the State, with the request that they would, by means of individual exertions, and petitions from local District Societies, endeavor to prevent the evils now existing, by placing the ambulance system more immediately under the control of the medical department, rather than under that of the quartermaster's department, whereby, the undersigned believe, the horrible abuses alluded to have been allowed to arise.

The undersigned likewise suggest the propriety of the Massachusetts Medical Society undertaking, by means of a Circular, signed by its proper officers, to bring this subject to the consideration of the State Medical Societies of the North and West.

HENRY I. BOWDITCH,
JOHN C. DALTON,
J. MASON WARREN,
JAMES AYER,
S. L. ABBOT,
} *Committee.*

Dr. Bowditch offered the following Resolutions, which, after discussion, were unanimously adopted.

Resolved, "That the Councillors recommend to the officers of the District Societies to prepare petitions relative to the abuses existing in the Ambulance arrangements of the Army, and, after obtaining signatures thereto, to forward them to the Secretary of War, through the members of Congress of their respective Districts."

Resolved, "That the President be requested to call attention of State Societies, in the other loyal States, to these abuses in the Ambulance system, with the request that they will take some action in the premises."

Dr. Gould, of Boston, called the attention of the Councillors to the decision of the Attorney General of the Commonwealth, that the Fellows of the Massachusetts Medical Society are liable to military draft, notwithstanding a clause in the Charter of the Society exempting them from enrolment in the militia.

The Secretary stated that he had been delegated by the Suffolk District Medical Society to bring this matter before the Councillors for such action as they should see fit.

Dr. H. J. Bigelow, of Boston, offered the following Resolution, which was unanimously adopted:

Resolved, "That a Committee of three be appointed by the Chair, to consider the subject of the military draft of members of the Massachusetts Medical Society, with power to consult legal counsel, and to take such further action as they may see fit."

The Chair appointed Drs. H. J. Bigelow, A. A. Gould and J. Mason Warren, of Boston, as the Committee.

Dr. John Homans, of Boston, was appointed one of the Committee on Finance, in place of Dr. John Ware, resigned.

The meeting adjourned at 12½ o'clock, P.M.

FRANCIS MINOT,
Recording Secretary.

February Meeting, 1863.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held at the Room in Temple Place, Boston, on Wednesday, February 4th, at 11 o'clock, A.M.

The President, Dr. Josiah Bartlett, in the Chair.

The following Councillors were present:—

Berkshire.
Henry H. Childs.

Essex North.
H. C. Perkins.

Essex South.
Ebenezer Hunt,
James M. Nye.

Middlesex East.
Jos. D. Mansfield,
H. P. Wakefield.

Middlesex South.
Josiah Bartlett,
A. B. Bancroft,
Henry Cowles,
Enos Hoyt.

Norfolk.
Ebenezer Alden,
B. E. Cotting,
J. G. S. Hitchcock,
C. C. Holmes,
Edward Jarvis,
Benjamin Mann,
Ebenezer Stone.

Plymouth.	Henry Dyer,	G. C. Shattuck,
Asa Millett.	John Flint,	D. H. Storer,
	J. B. Forsyth,	C. E. Ware,
Suffolk.	A. A. Gould,	J. M. Warren,
James Ayer,	A. B. Hall,	A. A. Watson.
J. Bigelow,	Geo. Hayward, Jr.	
H. J. Bigelow,	J. B. S. Jackson,	*Worcester.*
H. I. Bowditch,	John Jeffries,	H. A. Jewett.
S. Cabot, Jr.	Wm. W. Morland,	
W. E. Coale,	S. Morrill,	*Worcester North.*
J. C. Dalton,	E. Palmer,	Alfred Hitchcock.

The record of the preceding meeting was read and accepted.

Drs. Gould and H. J. Bigelow, of the Committee appointed at the last meeting to consider the subject of the liability of the members of the Massachusetts Medical Society to military draft, made a verbal report of their doings.

On motion of Dr. Bowditch, the subject was again referred to the same Committee, with full powers.

Dr. Gould, of the Committee on Membership and Resignations, made the following report:—

BOSTON, FEBRUARY 4th, 1863.

The Committee on Membership and Resignations report, that the following Fellows, having arrived at the age of sixty, and having paid all dues, desire to become Retired Members.

Dr. John C. Hayden, . . .	Boston;
" Danforth P. Wight, . . .	Dedham.

Dr. Charles W. Wilder, of Fitchburg, having relinquished practice as a physician, desires to resign fellowship.

It is recommended that these several requests be granted.

In conformity with the instructions of the Council, the Committee has examined the list of Delinquents, and find a large number whose cases require special attention. They may be classified as follows:

1. Those who have not been heard from for many years, and who are believed to have left the State. These should be marked on the Catalogue as removed from the State, and their names cancelled on the ledger.

2. Those who are far advanced in age, but who have neglected to make the requisite application to become Retired Members. It is recommended that their dues be remitted, and that they be marked as Retired Members.

3. Those who are known to be in such circumstances as to render it too burdensome to pay in full. It has been usual for the Treasurer to compromise with such persons at discretion.

4. Those who are known or believed to be abundantly able to pay, but who are neglectful or contumacious.

5. Certain persons who have never paid an assessment, and this for a period of many years; or who deny membership; or who, from a fancied inability to avail themselves of the privileges of the Society, contend that there are no privileges, and from other causes refuse to pay. These persons, it is believed, are subjects for expulsion, or to have their names stricken from the list of members.

It is recommended that these cases be given in charge to a special Committee, with full powers to act in the first four categories, and, after investigation, to present those of the fifth to the Council for action.

AUGUSTUS A. GOULD,
S. MORRILL,
JAMES AYER,
} *Committee.*

On motion of Dr. Flint, the report was accepted and adopted.

The Chair appointed the Committee on Finance and the Treasurer, as a special Committee to act in the matter, with full powers.

Dr. Wakefield, of Reading, in behalf of the Middlesex East District Society, offered the following amendment to the By-Laws:

"No Board of Censors shall admit to membership any individual who is a resident of another District, unless he presents a satisfactory certificate of standing, from the President, or at least two of the Censors of the District where he resides."

After discussion, Dr. Wakefield withdrew his amendment.

Dr. Cotting then offered the following Resolution, which was unanimously adopted:

Resolved, "That the Censors at Large are hereby instructed not to admit into the Society any person who is a resident, or in practice, in any District except their own."

Dr. Jeffries offered the following Resolutions, which were unanimously adopted:

Resolved, "That the Councillors of the Massachusetts Medical Society memorialize the Senate and House of Representatives in General Court assembled, in aid of the memorial of the Boston Sanitary Association, for the establishment of a Board of Health and Vital Statistics."

Resolved, "That the President, and six others appointed by the Chair, constitute the Committee to draw the Memorial and appear before the Special Committee of the Legislature, and show cause why the prayer of the petitioners should be granted."

The Chair appointed Drs. Jarvis, J. Ware, Jeffries, Perkins and Alden, to constitute, with the President, the Committee.

The Corresponding Secretary presented his annual report, which was accepted.

On motion of Dr. Watson, it was

Voted, "That the next Annual Meeting of the Councillors be held at Pittsfield, on the evening preceding the Annual Meeting of the Society, at 7½ o'clock."

The President appointed the following Committees:

On Treasurer's Accounts.

Dr. Silas Durkee, . . . Boston;
Dr. Phineas M. Crane, . . E. Boston.

On Library.

Dr. N. B. Shurtleff, . . . Boston;
Dr. Edw. H. Clarke, . . . Boston.

At 2½ o'clock, the Councillors adjourned.

FRANCIS MINOT,
Recording Secretary.

Annual Meeting, June 16th, 1863.

The Annual Meeting was held at the Berkshire House, Pittsfield, on Tuesday evening, June 16th, 1863, at 7½ o'clock.

The President, Dr. Josiah Bartlett, in the Chair.

The following Councillors were present:—

Berkshire.
Henry H. Childs,
Clarkson T. Collins,
J. Leland Miller,
Henry L. Sabin.

Bristol South.
Andrew Mackie.

Essex North.
Ebenezer Hunt.

Franklin.
C. M. Duncan.

Hampden.
Nathan Adams,
S. L. Chapman.

Hampshire.
L. E. Marsh.

Middlesex East.
Ephraim Cutter,
H. P. Wakefield.

Middlesex South.
Josiah Bartlett,
Jefferson Pratt,
J. B. Taylor.

Norfolk.
B. E. Cotting,
Edward Jarvis.

Plymouth.
Samuel A. Orr,
James Wilde.

Suffolk.
W. E. Coale,
J. B. Forsyth,
A. A. Gould,
J. B. S. Jackson,
Francis Minot,
A. A. Watson.

Worcester.
Ephraim Lovell,
Oramel Martin,
William Workman.

Worcester North.
David Parker.

The Secretary read the record of the preceding meeting.

Dr. Childs, of Berkshire District, welcomed the Council and Society to Pittsfield.

The Secretary read the names of the Fellows admitted, and of the Fellows deceased, during the year.

The Corresponding Secretary made a verbal report of his official doings during the year.

The Treasurer read his annual Report, and the report of the Auditing Committee, which were severally accepted and ordered to be placed on file.

Treasurer's Report.

In presenting his Nineteenth Report, the Treasurer desires to decline a re-election, as he would have done some years since, had it not been for a desire to see the treasury once more overflowing, after having been so deeply drained by the Law and by over-publication. But as the time when this can be accomplished seems yet too far in the dim distance, he is constrained to forego that gratification for himself. Not that much has not been already accomplished in this direction, and that a consummation will not ere long be effected. It might now be at hand, had it not been for a change in circumstances. We have already liquidated $2,811.42, with the interest, of the debt incurred by the notable lawsuit, and only one thousand remains to be paid; and have reduced the balance due the Treasurer about $1,100; and no new or extraordinary liabilities have been incurred, excepting a fee for counsel in the matter of the military draft. The present liabilities of the Society may be safely stated at $2,500, against $3,700 last year. Two circumstances have already modified, and will continue to modify our income, viz., the absence of not less than one hundred and fifty of our members in the army and navy; and the tax of one per cent. on our funded capital, which reduces our income, from that source, from $1,123 to $1,021 per annum. Add to this the additional price of eighty dollars which we are now obliged to pay for Braithwaite's Retrospect, and it will make a difference in receipts and expenditures of about $500 per annum.

It is hoped that the measures recommended by the Committee on Delinquencies may help to replenish largely the treasury.

It is now nineteen years that your Treasurer has been successively elected to his office; and he was more or less engaged with preceding Treasurers for ten years before—well nigh thirty years. At the time he entered upon the office, the receipts were $1,662, and the expenditures $774. Now the annual receipts and expenditures are each about $6,000. The invested fund was then $11,252; now it is $30.420. As to the amount of labor and vexation involved in the collection and disbursement of such an amount, derived in very small sums from such numerous and widespread sources, he will leave it for his successor to testify.

There was no report from the Committee on the Library, but the Treasurer made a verbal report on the subject of the Publications.

The Committee on Membership and Resignations reported as follows:

The following persons, having arrived at the age of sixty, and having paid their dues, desire to become Retired Members, and it is recommended that their request be granted, viz.:

Dr. Seneca Sargent, . . . Lawrence;
" Simeon Tucker, ... Stoughton;
" Joseph D. Nichols, . . . Taunton.

Dr. E. J. Davenport, having been disabled by illness for several years, and not expecting again to resume practice, desires to have his dues remitted and to resign his membership.

It is recommended that his request be granted.

AUGUSTUS A. GOULD,
June 16th, 1863. *For the Committee.*

The report was accepted, and the recommendations of the Committee were adopted.

The Committee appointed at the last meeting to act in the matter of a report by the Committee on Membership and Resignations, made the following report:—

The Committee on Finance, who, with the Treasurer, were appointed a Special Committee, with full powers, to act in the matter of a report by the Committee on Membership and Resignations, concerning the disposition of delinquent members, ask leave to report,

That they have examined the list of delinquents, and have distributed them under the following heads, viz.:

1. Those who are far advanced in age, but who have neglected to make the requisite application to become Retired Members.

It is recommended that their dues be remitted, and that they be considered as Retired Members.

2. Those who are believed to be abundantly able to pay, but who, from neglect or disinclination, have failed to do so. Some, indeed, have never paid an assessment since entrance.

It is recommended that those who owe five assessments, and less than ten, be immediately sued for the same; and that those who are delinquent for ten assessments be informed that unless their dues are satisfactorily adjusted within a specified time, their names will be stricken from the list of members.

3. Those who deny membership, or appear to have been enrolled without their knowledge or consent.

It is recommended that their names be erased from our Catalogue.

4. Those who have not been heard from for many years, and who are believed to have left the State.

It is recommended that such persons be marked as Removed, that their accounts be discontinued on the Treasurer's books, and a mere list of such dues be entered on the books, for future reference.

A list of names selected to be placed under the several heads is herewith submitted, by

S. D. Townsend,
For the Committee.

The report was accepted and adopted.

On motion of Dr. Martin, of Worcester, it was

Voted, "That the next Annual Meeting of the Society be held in Boston."

The Chair appointed the following Committees:—

On Publications.

Drs. C. G. Putnam, G. C. Shattuck, W. W. Morland.

On Finance.

Drs. A. A. Gould, J. C. Dalton, B. E. Cotting.

On Membership and Resignations.

Drs. A. A. Gould, James Ayer, Francis Minot.

The Committee on Nominations reported the following list of officers:—

Dr. Josiah Bartlett, Concord, . . .	*President.*
" Ebenezer Alden, Randolph, . . .	*Vice-President.*
" B. E. Cotting, Roxbury, ...	*Cor. Secretary.*
" Wm. W. Morland, Boston, . . .	*Rec. Secretary.*
" W. E. Coale, Boston, ...	*Librarian.*
" Francis Minot, Boston, ...	*Treasurer.*

And they were duly elected by ballot.

The same Committee reported the following nominations:

For Orator, Dr. J. Mason Warren, Boston.

For Anniversary Chairman, Dr. H. J. Bigelow, Boston.

For Committee of Arrangements, Drs. W. E. Coale, Ezra Palmer, W. E. Townsend, Francis Minot, of Boston; Dr. Anson Hooker, of East Cambridge.

And they were duly elected.

The Chair appointed Drs. John Homans and Charles E. Ware, of Boston, a Committee to transfer the Treasurer's books and accounts to his successor.

On motion of Dr. Jarvis, of Dorchester, it was

Voted, "That the thanks of the Society be tendered to Dr. A. A. Gould, for his long, faithful and valuable services as Treasurer."

The Chair appointed Drs. Cutter, of Woburn, Watson, of Boston, and Cotting, of Roxbury, a Committee to report what tribute, if any, the Society ought to furnish to Dr. Copland, of London, the author of the Dictionary of Practical Medicine, who is stated to be largely a loser, pecuniarily, by the publication of the American edition of his work.

At 10 o'clock the Councillors adjourned.

FRANCIS MINOT,
Recording Secretary.

Massachusetts Medical Society.

PROCEEDINGS OF THE SOCIETY.

ANNUAL MEETING,

JUNE 17, 1863.

THE Annual Meeting of the Society was held in the Berkshire Medical College, Pittsfield, on Wednesday, June 17th, 1863, at 10 o'clock, A.M.

The President, Dr. JOSIAH BARTLETT, in the Chair.

The Secretary read the record of the preceding meeting, and laid before the Society the record of the Councillors for the preceding year.

The Secretary read the names of those who have become Fellows since the last Annual Meeting, and the Fellows deceased during the year.

Fellows admitted since May, 1862.

Nathan Barrows, . . .	Sandwich.
Stephen Wallace Bowles, .	Boston.
William Henry Bradley, . .	Lowell.
F. D. Brown, ...	Webster.
Walter Burnham, . . .	Lowell.
Marshall Calkins, . . .	Springfield.
Marcus S. Carpenter, . .	South Boston.

James Coolidge,	Athol Depot.
William Dwight,	Bernardstown.
William Eddy,	New Bedford.
James Emerson,	Ashby.
James B. Everett,	Falmouth.
Artemas Ira Fenn,	Boston.
W. K. Fletcher,	Fitchburg.
William Caldwell Flowers,	Boston.
W. W. Godding,	Fitchburg.
Neil K. Gunn,	U. S. Army.
L. H. Hammond,	Oakham.
John Hart,	Boston.
Silas P. Holbrook,	E. Douglass.
John Homans, Jr.	U. S. Army.
Robert E. Jameson,	Woburn.
Maurice C. Jones,	Chelsea, U. S. M. H.
Alfred Livingston,	Lowell.
Henry Orlando Marcy,	Cambridge.
Saxton P. Martin,	New Braintree.
Murdock McGregor,	Boston.
Joseph Waite Merriam,	U. S. Navy.
Abiel W. Nelson,	Middleboro'.
Varillus Linus Owen,	Springfield.
George Thomas Perkins,	Roxbury.
George Edwin Pinkham,	Lowell.
Joseph Brown Reynolds,	Concord.
Jonathan Chamberlain Shattuck,	Pepperell.
Edward M. Skinner,	Boston.
Jesse W. Snow,	Danvers.
Morris Spofford,	Groveland.
Thomas N. Stone,	Wellfleet.
Charles Sturtevant,	New Bedford.
Nelson B. Tanner, Jr.	N. Abington.
Augustus Valentine Tourtelot,	Boston.
B. H. Tripp,	Rutland.
H. P. Walcott	Cambridge.
George A. Ward,	Holyoke.
George Whitfield Ward,	Upton.
Emerson Warner,	Shrewsbury.
Dewey Kellog Warren,	Boston.
Homer Howard Warner,	Springfield.
Charles Augustus Wheeler,	W. Boylston.
Burt G. Wilder,	Newtonville.
Joseph W. Winslow,	Easthampton.
Alexander M. Wood,	Boston.

Fellows deceased since May, 1862.

Admitted.	Name.	Residence.	Date of Decease.		Age.
1851	Samuel L. Bigelow.....	Hagerstown, Md.	Nov. 1,	1862	36
1838	Clark Blaisdell.....	Marblehead.....	Nov. 23,	1862	54
1855	Wm. T. S. Brackett....	Olneyville, R. I.	Oct. 17,	1862	34
1820	Artemas Brown.....	Medway.....		1862	
1854	Joaquim A. A. Cordeiro.	Brazil.....	July,	1862	
1851	Hiram M. Couch.....	Georgetown		1862	44
1845	George Cutler.....	Charlestown	Jan. 17,	1863	49
1847	Charles A. Davis.....	Chelsea.....	April 9,	1863	
1854	Henry Gilmore.....	Brookfield		1862	61
1863	Neil K. Gunn.....	U. S. A.	May,	1863	
1855	S. Foster Haven.....	Worcester.....	Dec. 13,	1862	31
1842	Rufus L. Hinckley	East Boston.....	Oct. 3,	1862	45
1855	Albert A. Kendall.....	Newton L. Falls.	Sept. 17,	1862	34
1848	Samuel A. Lord.....	South Danvers..	Oct. 10,	1862	40
1859	Deodat Mignault.....	Lowell	Nov. 11,	1862	29
1834	Julius H. Morse.....	Lawrence.....	July 26,	1862	54
1821	Benjamin Osgood.....	Westford	Feb. 1,	1863	82
1821	David Osgood.....	Boston	Feb. 23,	1863	69
1844	Calvin B. Pratt.....	Bridgewater.....	Sept. 4,	1862	
1833	Alpheus Proctor	Chelsea.....	Aug. 21,	1862	56
1850	E. H. R. Revere.....	Canton.....	Sept. 17,	1862	35
1839	William S. Saunders...	Sturbridge.....	Nov. 5,	1862	
1821	Paul Spooner.....	New Bedford....	July 18,	1862	74
1842	Augustus G. Stickney..	W. Townsend...		1862	50
1856	Robert Ware.....	Boston	April 4,	1863	29
1838	C. H. Wheelwright....	U. S. N.	July 30,	1862	49
1803	John Walton.....	Pepperell	Dec. 21,	1862	92

The Secretary announced the following Delegates from other Societies, who were present at this meeting.

From the New Jersey Medical Society.

Drs. William Elmer, . . . Bridgetown.
R. F. Chabert, . . . Hoboken.
T. R. Varick, . . Jersey City.

From the New York Medical Society.

Drs. Alden March, . . . Albany.
John Swinburne, . . . "
S. D. Willard, . . . "
J. V. P. Quackenbush, . "
James R. Wood, . . New York.
Lewis A. Sayre, . . . "
Isaac E. Taylor, . . . "
Thos. C. Brinsmade, . . Troy.
Wm. P. Seymour, . . . "

From the Connecticut Medical Society.

Dr. James Welch.

The Chair appointed the following Delegates to attend the Annual Meetings of different State Societies.

To the Maine Medical Society.

Drs. Kimball,	Lowell.
Babbit,	N. Adams.

To the New Hampshire Medical Society.

Drs. Reynolds,	Concord.
J. Mason Warren,	Boston.

To the Vermont Medical Society.

Drs. Miller,	Pittsfield.
Dalton,	Boston.

To the Connecticut Medical Society.

Drs. Collins,	Great Barrington.
H. R. Storer,	Boston.

To the Rhode Island Medical Society.

Drs. Alden,	Randolph.
Anson Hooker,	East Cambridge.

To the New York Medical Society.

Drs. Childs,	Pittsfield.
Sabin,	Williamstown.

To the New Jersey Medical Society.

Drs. Sargent,	Worcester.
Hodges,	Boston.

On motion of Dr. Wakefield, of Reading, it was

Voted, "That the Resolve of the Councillors, of February 4th, 1863, instructing the Censors at Large respecting the admission of candidates from other Districts than Suffolk, be adopted by the Society."

Dr. H. R. Storer, of Boston, read a paper on "The Employment of Anæsthetics in Obstetric Medicine and Surgery;" which was referred to the Committee on Publications.

Dr. Swinburne, of Albany, N. Y., presented a paper on the subject of the Ambulance Service, for the consideration of the Society; which was referred to the Councillors.

At 12 o'clock, M., Dr. Morrill Wyman, of Cambridge, pronounced the Annual Discourse.

On motion of Dr. Babbit, of North Adams, the thanks of the Society were tendered to Dr. Wyman for his exceedingly able, instructive and interesting address.

The Society adjourned at 1½ o'clock, P.M.

At 2½ o'clock, P.M., the Society partook of a most elegant and bountiful dinner, by invitation of the citizens of Pittsfield, at which Dr. H. H. Childs, of Pittsfield, presided, as Anniversary Chairman.

Before the Fellows separated for their homes, the following Resolution, offered by Dr. William E. Coale, of Boston, was unanimously adopted:—

Resolved, "That the thanks of the Massachusetts Medical Society be presented to the Fellows of the Berkshire District Medical Society, to the Physicians, Principal of the Maplewood Young Ladies' Institute, and Citizens of Pittsfield, for their cordial welcome and generous hospitality; which, in connection with the pure air and unsurpassed mountain scenery of this delightful region, have made this one of the most pleasant and interesting of our annual gatherings."

FRANCIS MINOT,
Recording Secretary.

Dr. Massachusetts Medical Society in Account with Augustus A. Gould, Treasurer. Cr.

Received at Annual Meeting,			$186.00
Sundry Assessments,			579.00
From Districts.	Barnstable,	$39.00	
	Berkshire,	143.00	
	Bristol South,	96.00	
	Essex North,	79.00	
	Essex South,	132.00	
	Franklin,	66 00	
	Hampden,	45.00	
	Hampshire,	27.00	
	Middlesex North,	69.00	
	Middlesex South,	87.00	
	Norfolk,	63.00	
	Plymouth,	51 00	
	Suffolk,	360 00	
	Worcester,	210 00	
	Worcester North,	66.00	
			1,533.00
Interest — Permanent Fund,		562.66	
	Shattuck Legacy,	458.34	
	Phillips Legacy,	600.00	
			1,621.00
Rents and Taxes,			508.00
Notes payable — Gould & Lincoln (5 mos.)			600 00
Recording Secretary — Diplomas,			24 00
Due from Dr. Homans, on settlement,			16.56
Balance due Treasurer,			767.40
		Total,	$5,834.96

Balance due Treasurer from last Account,			$1,923.39
Refunded to Districts.	Barnstable,	$12.75	
	Berkshire,	35 00	
	Bristol South,	24 00	
	Essex North,	17 00	
	Essex South,	48.75	
	Franklin,	19 50	
	Hampden,	15 00	
	Hampshire,	12.75	
	Middlesex East,	2.25	
	Middlesex North,	19.50	
	Middlesex South,	35.25	
	Norfolk,	35 50	
	Plymouth,	20 25	
	Suffolk,	84 66	
	Worcester,	81.75	
	Worcester North,	27.75	
			491.66
District Treasurers' Commissions,			55.10
Publications,			1,294.19
Rent, care of Rooms, and Taxes,			630.50
Notes Payable,			907.36
Interest and Discount,			163.82
Incidentals,			37.25
Recording Secretary and Librarian,			31.69
Treasurer's Salary,			300.00
		Total,	$5,834.96

AUGUSTUS A. GOULD, Treasurer.

Boston, June 15, 1863.

The subscribers have examined the account of Dr. A. A. Gould, Treasurer of the Massachusetts Medical Society, and find it to be correctly cast and properly vouched. The receipts have been $5,067.58, and the expenditures have been $5,834.98, leaving a balance due the Treasurer of $767.40.

Silas Durkee, } *Auditing Com.*
P. M. Crane, }

Officers of the Massachusetts Medical Society.

1863 — 64.

Chosen June 16th, 1863.

JOSIAH BARTLETT, . . . Concord, . . . President.
EBENEZER ALDEN, . . . Randolph, . . Vice-President.
BENJAMIN E. COTTING, Roxbury, . . . Cor. Secretary.
WM. W. MORLAND, . . . Boston, ... Rec. Secretary.
WILLIAM E. COALE, . . Boston, ... Librarian.
FRANCIS MINOT, ... Boston, ... Treasurer.

Vice-Presidents (Ex-Officiis.)

[Arranged according to Seniority.]

Paul L. Nichols.
D. H. Storer.
Augustus Torrey.
John C. Bartlett.
George B. Atwood.
Erastus D. Miller.
Selden Jennings.
Cyrus Bell.
Horace P. Wakefield.
Calvin P. Fiske.
Alvan Godding.
Enoch Cross.
John W. Osgood.
John R. Bronson.
James Dunlop.
John M. Smith.
Nathaniel G. Trow.

Councillors.

Barnstable.—Drs. Elijah W. Carpenter, Nath'l B. Danforth, Chatham; Jonathan Leonard, Sandwich; John M. Smith, Barnstable.

BERKSHIRE. — Drs. Henry H. Childs, Pittsfield; Clarkson T. Collins, Great Barrington; J. Leland Miller, Pittsfield; Henry L. Sabin, Williamstown.

BRISTOL NORTH. — William G. Allen, Mansfield; Charles How, Henry B. Hubbard, Taunton.

BRISTOL SOUTH. — Drs. Aaron Cornish, New Bedford; P. E. Doggett, Wareham; William A. Gordon, Frederick H. Hooper, New Bedford; John H. Mackie, Wareham.

ESSEX NORTH. — Drs. John Crowell, Jr., Haverhill; Francis A. Howe, Newburyport; William D. Lamb, Lawrence; Oliver S. Lovejoy, Haverhill; Martin Root, Byfield.

ESSEX SOUTH. — Drs. Benjamin Cox, Jr., Salem; Benjamin Haskell, Rockport; Ebenezer Hunt, Danvers; James M. Nye, Lynn; Edward B. Peirson, Salem; Augustus Torrey, Beverly.

FRANKLIN. — Drs. Edward Barton, Orange; C. M. Duncan, Shelburne; William Dwight, Bernardston; David Rice, Leverett.

HAMPDEN. — Drs. William G. Breck, Springfield; T. L. Chapman, Longmeadow; P. L. B. Stickney, Chicopee.

HAMPSHIRE. — Drs. Lebbeus E. Marsh, Granby; Benjamin F. Smith, Amherst; Daniel Thompson, Northampton.

MIDDLESEX NORTH. — Drs. John C. Bartlett, Chelmsford; Elisha Huntington, Lowell; Austin Marsh, Carlisle; Edw. A. Perkins, Tyngsboro'; Charles A. Savory, Lowell.

MIDDLESEX EAST. — Drs. A. Chapin, Winchester; Ephraim Cutter, Woburn; Joseph D. Mansfield, South Reading; Horace P. Wakefield, Reading.

Middlesex South. — Drs. C. H. Allen, Cambridgeport; A. B. Bancroft, Charlestown; Josiah Bartlett, *President*, Concord; Henry Cowles, Saxonville; Howland Holmes, Lexington; Enos Hoyt, Framingham; O. E. Hunt, Weston; F. R. C. Kittredge, Waltham; A. C. Livermore, Stow; Augustus Mason, Brighton; Louis E. Partridge, Natick; Jefferson Pratt, Hopkinton; J. B. Taylor, East Cambridge.

Norfolk. — Drs. Benjamin E. Cotting, Roxbury, *Cor. Secretary;* Benjamin Cushing, Dorchester; Joseph G. S. Hitchcock, Foxboro'; Christopher C. Holmes, Milton; Edward Jarvis, Dorchester; Benjamin Mann, Roxbury; Josiah Noyes, Needham; Ebenezer Stone, Walpole.

Plymouth. — Drs. Josiah S. Hammond, Plympton; Asa Millet, Abington; Samuel A. Orr, East Bridgewater; James Wilde, Duxbury.

Suffolk. — Drs. S. L. Abbot, J. Ayer, G. Bartlett, J. Bigelow, H. J. Bigelow, H. I. Bowditch, S. Cabot, Jr., H. G. Clark, W. E. Coale, *Librarian*, Boston; P. M. Crane, East Boston; W. J. Dale, J. C. Dalton, H. Dyer. J. Flint, Boston; J. B. Forsyth, Chelsea; C. Gordon, A. A. Gould, A. B. Hall, G. Hayward, G. Hayward, Jr., J. Homans, J. B. S. Jackson, J. Jeffries, F. Minot, *Treasurer*, W. W. Morland, *Rec. Secretary*, S. Morrill, E. Palmer, C. G. Putnam, G. C. Shattuck, D. H. Storer, C. E. Ware, J. M. Warren, J. W. Warren, A. A. Watson, Boston.

Worcester. — Drs. Henry A. Jewett, Francis Leland, Northboro'; Ephraim Lovell, West Boylston; John G. Metcalf, Mendon; Oramel Martin, Joseph Sargent, William Workman, Worcester; Edward M. Wheeler, Spencer.

Worcester North. — Drs. Thomas R. Boutelle, Fitchburg; Alvah Godding, Winchendon; Alfred Hitchcock, Fitchburg; David Parker, Gardner.

BERKSHIRE. — Drs. Henry H. Childs, Pittsfield; Clarkson T. Collins, Great Barrington; J. Leland Miller, Pittsfield; Henry L. Sabin, Williamstown.

BRISTOL NORTH. — William G. Allen, Mansfield; Charles How, Henry B. Hubbard, Taunton.

BRISTOL SOUTH. — Drs. Aaron Cornish, New Bedford; P. E. Doggett, Wareham; William A. Gordon, Frederick H. Hooper, New Bedford; John H. Mackie, Wareham.

ESSEX NORTH. — Drs. John Crowell, Jr., Haverhill; Francis A. Howe, Newburyport; William D. Lamb, Lawrence; Oliver S. Lovejoy, Haverhill; Martin Root, Byfield.

ESSEX SOUTH. — Drs. Benjamin Cox, Jr., Salem; Benjamin Haskell, Rockport; Ebenezer Hunt, Danvers; James M. Nye, Lynn; Edward B. Peirson, Salem; Augustus Torrey, Beverly.

FRANKLIN. — Drs. Edward Barton, Orange; C. M. Duncan, Shelburne; William Dwight, Bernardston; David Rice, Leverett.

HAMPDEN. — Drs. William G. Breck, Springfield; T. L. Chapman, Longmeadow; P. L. B. Stickney, Chicopee.

HAMPSHIRE. — Drs. Lebbeus E. Marsh, Granby; Benjamin F. Smith, Amherst; Daniel Thompson, Northampton.

MIDDLESEX NORTH. — Drs. John C. Bartlett, Chelmsford; Elisha Huntington, Lowell; Austin Marsh, Carlisle; Edw. A. Perkins, Tyngsboro'; Charles A. Savory, Lowell.

MIDDLESEX EAST. — Drs. A. Chapin, Winchester; Ephraim Cutter, Woburn; Joseph D. Mansfield, South Reading; Horace P. Wakefield, Reading.

MIDDLESEX SOUTH. — Drs. C. H. Allen, Cambridgeport; A. B. Bancroft, Charlestown; JOSIAH BARTLETT, *President*, Concord; Henry Cowles, Saxonville; Howland Holmes, Lexington; Enos Hoyt, Framingham; O. E. Hunt, Weston; F. R. C. Kittredge, Waltham; A. C. Livermore, Stow; Augustus Mason, Brighton; Louis E. Partridge, Natick; Jefferson Pratt, Hopkinton; J. B. Taylor, East Cambridge.

NORFOLK. — Drs. BENJAMIN E. COTTING, Roxbury, *Cor. Secretary;* Benjamin Cushing, Dorchester; Joseph G. S. Hitchcock, Foxboro'; Christopher C. Holmes, Milton; Edward Jarvis, Dorchester; Benjamin Mann, Roxbury; Josiah Noyes, Needham; Ebenezer Stone, Walpole.

PLYMOUTH. — Drs. Josiah S. Hammond, Plympton; Asa Millet, Abington; Samuel A. Orr, East Bridgewater; James Wilde, Duxbury.

SUFFOLK. — Drs. S. L. Abbot, J. Ayer, G. Bartlett, J. Bigelow, H. J. Bigelow, H. I. Bowditch, S. Cabot, Jr., H. G. Clark, W. E. COALE, *Librarian*, Boston; P. M. Crane, East Boston; W. J. Dale, J. C. Dalton, H. Dyer. J. Flint, Boston; J. B. Forsyth, Chelsea; C. Gordon, A. A. Gould, A. B. Hall, G. Hayward, G. Hayward, Jr., J. Homans, J. B. S. Jackson, J. Jeffries, F. MINOT, *Treasurer*, W. W. MORLAND, *Rec. Secretary*, S. Morrill, E. Palmer, C. G. Putnam, G. C. Shattuck, D. H. Storer, C. E. Ware, J. M. Warren, J. W. Warren, A. A. Watson, Boston.

WORCESTER. — Drs. Henry A. Jewett, Francis Leland, Northboro'; Ephraim Lovell, West Boylston; John G. Metcalf, Mendon; Oramel Martin, Joseph Sargent, William Workman, Worcester; Edward M. Wheeler, Spencer.

WORCESTER NORTH. — Drs. Thomas R. Boutelle, Fitchburg; Alvah Godding, Winchendon; Alfred Hitchcock, Fitchburg; David Parker, Gardner.

Censors.

Barnstable. — Drs. Elisha W. Carpenter, Chatham; Geo. W. Doane, Hyannis; Franklin Dodge, Harwich; Samuel H. Gould, Brewster; John M. Smith, Barnstable.

Berkshire. — Drs. Lucius S. Adams, Stockbridge; Frank A. Cady, Pittsfield; C. C. Holcomb, Lee; Henry Pratt, Lanesboro'.

Bristol North. — Drs. John R. Bronson, Attleboro'; John B. Chace, Henry B. Hubbard, Taunton.

Bristol South. — Drs. Lyman Barrett, New Bedford; William W. Comstock, Middleboro'; Foster Hooper, Fall River; Andrew Mackie, Charles D. Stickney, New Bedford.

Essex North. — Drs. David Dana, Lawrence; Kendall Flint, Haverhill; Walter H. Kimball, Andover; Henry C. Perkins, Newburyport; Jeremiah Spofford, Groveland.

Essex South. — Drs. George A. Perkins, H. Osgood Stone, and Henry Wheatland, Salem.

Franklin. — A. C. Deane, Greenfield; E. A. Deane, Montague; C. L. Knowlton, Ashfield.

Hampden. — Drs. William G. Breck, William B. Miller, Springfield; P. L. B. Stickney, Chicopee.

Hampshire. — Drs. Edward B Barrett, Northampton; Franklin Bonney, Hadley; Austin W. Thompson, Northampton.

Middlesex North. — Drs. Jonathan Brown, Tewksbury; Levi Howard, Chelmsford; Elisha Huntington, Harlin Pillsbury, Charles A. Savory, Lowell.

Middlesex East. — Drs. Alonzo Chapin, Winchester; Ephraim Cutter, *Secretary*, Woburn; Samuel A. Toothaker, Wilmington.

Middlesex South. — Drs. J. Henry Brown, W. Newton; Moses Clarke, East Cambridge; Morrill Wyman, Cambridge.

Norfolk. — Drs. Ebenezer P. Burgess, Dedham; William C. B. Fifield, Dorchester; D. Wayland Jones, Medfield; Joel Seaverns, Jamaica Plain; Charles C. Tower, South Weymouth.

Plymouth. — Drs. Josiah H. Hammond, Plympton; Benjamin Hubbard, Plymouth; James F. Richards, North Bridgewater.

Suffolk. — Drs. J. N. Borland, *Secretary*, C. D. Homans, F. Minot, F. E. Oliver, Henry W. Williams, Boston.

Worcester. — Drs. Henry Clarke, *Secretary*, Thomas H. Gage, Rufus Woodward, Worcester; M. D. Southwick, Blackstone; C. A. Wilcox, Uxbridge.

Worcester North. — Drs. Alfred Miller, Fitchburg; James P. Lynde, Athol; James O. Parker, Shirley; Isaac P. Willis, Royalston; C. C. Field, Leominster.

Commissioners of Trials.

Barnstable	George Shove	Yarmouth Port.
Berkshire	Henry H. Childs . . .	Pittsfield.
Bristol North . .	Thaddeus Phelps . . .	Attleboro'.
Bristol South . .	Aaron Cornish	New Bedford.
Essex North . . .	Jeremiah Spofford . .	Groveland.
Essex South . . .	George Choate	Salem.
Franklin	Elijah Stratton	Northfield.
Hampden	Nathan Adams	Springfield.
Hampshire	Samuel A. Fisk	Northampton.
Middlesex North .	John O. Green	Lowell.

Middlesex East	Benjamin Cutter	Woburn.
Middlesex South	Anson Hooker	E. Cambridge.
Norfolk	Ebenezer Alden	Randolph.
Plymouth	Timothy Gordon	Plymouth.
Suffolk	Silas Durkee	Boston.
Worcester	William Workman	Worcester.
Worcester North	James O. Parker	Shirley.

Officers of the District Medical Societies.

Barnstable. — Dr. John M. Smith, Barnstable, *President*; Dr. Chauncy M. Hurlbut, South Dennis, *Vice-President*; Dr. Nathaniel B. Danforth, Chatham, *Secretary*; Dr. Elijah W. Carpenter, Chatham, *Treasurer and Librarian*.

Berkshire. — Dr. Selden Jennings, Richmond, *President*; Dr. Samuel Duncan, Williamstown, *Vice-President*; Dr. Frank A. Cady, Pittsfield, *Secretary*; Dr. Abner M. Smith, Pittsfield, *Treasurer and Librarian*.

Bristol North. — Dr. John R. Bronson, Attleboro', *President*; Dr. Joseph Murphy, Taunton, *Vice-President*; Dr. John B. Chace, Taunton, *Secretary and Treasurer*; Dr. Ira Sampson, Taunton, *Librarian*.

Bristol South. — Dr. George Atwood, Fairhaven, *President*; Dr. F. D. Bartlett, Dartmouth, *Vice-President*; Dr. Frederick H. Hooper, New Bedford, *Secretary, Treasurer and Librarian*.

Essex North. — Dr. Enoch Cross, Newburyport, *President*; Dr. George W. Garland, Lawrence, *Vice-President*; Dr. Martin Root, Byfield, *Secretary and Treasurer*; Dr. Kendall Flint, Haverhill, *Librarian*.

Essex South. — Dr. Augustus Torrey, Beverly, *President;* Dr. Benjamin Cox, Jr., Salem, *Vice-President;* Dr. David Choate, Salem, *Secretary;* Dr. William Mack, Salem, *Treasurer;* Dr. H. Osgood Stone, Salem, *Librarian.*

Franklin. — Dr. N. G. Trow, Sunderland, *President;* Dr. Stephen Bates, Claremont, *Vice-President;* Dr. Charles T. Lyons, Coleraine, *Secretary, Treasurer and Librarian.*

Hampden. — Dr. Cyrus Bell, Feeding Hills, *President;* Dr. —— ——, *Vice-President;* Dr. William G. Breck, Springfield, *Secretary, Treasurer and Librarian.*

Hampshire. — Dr. James Dunlap, Northampton, *President;* Dr. William M. Trow, Haydenville, *Vice-President;* Dr. Edward B. Barrett, Northampton, *Secretary;* Dr. Artemas Bell, Southampton, *Treasurer.*

Middlesex North. — Dr. John C. Bartlett, Chelmsford, *President;* Dr. Jonathan Brown, Tewksbury, *Vice-President;* Dr. George K. Whittemore, Lowell, *Secretary;* Dr. Nathaniel B. Edwards, North Chelmsford, *Treasurer;* Dr. Jeremiah P. Jewett, Lowell, *Librarian.*

Middlesex East. — Dr. Horace P. Wakefield, Reading, *President;* Dr. J. D. Mansfield, South Reading, *Vice-President;* Dr. Ephraim Cutter, Woburn, *Secretary;* Dr. Benjamin Cutter, Woburn, *Treasurer and Librarian.*

Middlesex South. — Dr. John W. Osgood, Saxonville, *President;* Dr. Theodore Kittredge, Waltham, *Vice-President;* Dr. Francis H. Brown, Cambridge, *Secretary;* Dr. Royal S. Warren, Waltham, *Treasurer.*

Norfolk. — Dr. Erasmus D. Miller, Dorchester, *President;* Dr. Benjamin E. Cotting, Roxbury, *Vice-President;* Dr. Edward Jarvis, Dorchester, *Secretary;* Dr. Danforth P. Wight, Dedham, *Treasurer;* Dr. David S. Fogg, South Dedham, *Librarian.*

PLYMOUTH. — Dr. Paul L. Nichols, Kingston, *President*; Dr. Winslow Warren, Plymouth, *Vice-President*; Dr. Henry N. Jones, Kingston, *Secretary and Treasurer*; Dr. Francis Collamore, Pembroke, *Librarian*.

SUFFOLK. — Dr. D. H. Storer, Boston, *President*; Dr. S. L. Abbot, Boston, *Vice-President*; Dr. D. W. Cheever, Boston, *Secretary*; Dr. C. D. Homans, Boston, *Treasurer*; Dr. Calvin Ellis, Boston, *Librarian*.

WORCESTER. — Dr. C. P. Fiske, Fiskedale, *President*; Dr. Joseph Sargent, Worcester, *Vice-President*; Dr. Henry C. Prentiss, Worcester, *Secretary and Librarian*; Dr. Thomas H. Gage, Worcester, *Treasurer*.

WORCESTER NORTH. — Dr. A. Godding, Winchendon, *President*; Dr. Thomas R. Boutelle, Fitchburg, *Vice-President and Treasurer*; Dr. George D. Colony, Fitchburg, *Secretary and Librarian*.

SUPPLEMENT TO THE CATALOGUE.

LIST OF THOSE WHO HAVE BECOME FELLOWS SINCE THE PRINTING OF THE CATALOGUE IN 1854.

☞ Fellows whose *names* are not written IN FULL in the Catalogue, will please send them to the Recording Secretary, WM. W. MORLAND, 13 Arlington Street, Boston, forthwith, that they may be inserted in the new edition.

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1855	Abbott, Ezra	Canton			
1862	Abbott, Samuel Warren	Woburn			
1855	Adams, Zabdiel B.	Boston			
1860	Allen, A. N.	Pittsfield			
1859	Allen, Justin	Topsfield			
1863	Allen, William	Mansfield			
1862	Allen, William George	Mansfield			
1860	Ames, Joseph S.	Holden			
1861	Andrews, Robert	Orange			
1862	Andrews, R. Foster	Gardner			
1861	Arnold, George J.	Roxbury			
1858	Aten, Henry F.	Dedham			
1854	Barker, Bowen	S. Hanson			
1860	Barker, John W.	Easthampton			
1860	Barnes, Edward F.	Marlborough			
1855	Barnes, John	Milford			
1856	Barnes, Norman S.	Pittsfield			
1861	Barrett, Edward B	Northampton			
1858	Barrett, William M.	Fitchburg			
1863	Barrow, Nathan	Sandwich			
1861	Barstow, Noyes	Bernardston			
1855	Bartlett, Ezra	Concord, N. H.			
1861	Bates, Joseph N.	Worcester			
1856	Beals, H. H.	Pittsfield			
1858	Bement, John W.	Belchertown			
1857	Bemis, Merrick	Worcester			
1855	Bemis, Nathaniel O.	Hubbardston			
1857	Bennett, A. W.	Uxbridge			
1855	Blake, John E.	Middletown, Ct.			
1861	Blake, John G.	Boston			
1859	Both, Carl	Boston			
1859	Boynton, Royal B.	Townsend			
1855	Brackett, Wm. T. S.	Olneyville, R. I.			
1863	Bradley, William Henry	Lowell			
1860	Breed, B. B.	Lynn			
1858	Brewster, John M., Jr.	Palmer Depot			
1856	Briggs, Charles E.	Boston			
1857	Brink, Edwin	Pittsfield			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1863	Brown, F. D.	Webster			
1861	Brown, Francis Henry	Cambridge			
1855	Brown, J. Henry	West Newton			
1857	Brown, Orlando	Wrentham			
1862	Brown, Wm. Symington	South Reading			
1860	Bryant, Albert H	Natick			
1859	Burleigh, William H	Lawrence			
1859	Burge, William B	Taunton			
1855	*Burgess, G. M.	Blackstone		1859	42
1861	Burnett, Elisha G.	Webster			
1863	Burnham, Walter	Lowell			
1856	Bushnell, William	Boston			
1861	Buttrick, James T.	Wilton, N. H.			
1858	Campbell, Benjamin	East Boston			
1862	Carney, Sidney H.	Boston			
1861	Cass, Jonathan	Great Barrington			
1858	Chace, John B.	Taunton			
1858	Chamberlain, Eben. N.	Millbury			
1860	Chapin, Horace	Fairmount			
1856	Chase Irah E.	Haverhill			
1858	Chace, Preston M.	Danvers			
1858	Cheever, David W.	Boston			
1855	Clark, Henry	Worcester			
1858	Coggswell, George B.	Bridgewater			
1859	Collamore, George A.	Toledo, Ohio			
1855	Collins, Clarkson T.	Great Barrington			
1855	Cook, McLaurin F.	Boston			
1856	Coolidge, James	Orange			
1863	Coolidge, James	Athol Depot			
1862	Corey, Charles G.	Royalston			
1857	Cowdray, Harris	Acton			
1856	Cowles, H.	Saxonville			
1859	Crehore, Charles F.	Boston			
1856	Crowell, John, Jr.	Haverhill			
1857	Crozier, Arthur T.	Maysville, Ark.			
1861	Curtis, Hall	Boston			
1862	Cushing, Joseph Whitney	Boston			
1856	Cutter, Ephraim	Woburn			
1862	Damon, Howard Franklin	Boston			
1862	Davis, Charles E.	Ashby			
1860	Dean, John	Boston			
1861	Deane, Ebenezer A.	Montague			
1862	Dearing, Thomas Haven	S. Scituate			
1859	Delano, Marcus F.	Sterling			
1862	Derby, Hasket	Boston			
1860	Dewolf, Oscar C.	Pittsfield			
1861	Dole, Francis F.	Reading			
1860	Dow, John O.	Harvard			
1858	Draper, Joseph	Brattleboro', Vt.			
1857	Drew, David F.	Lynn			
1862	Drummond, Tho. Mengies	Boston			
1855	Durgin, Elijah S.	Boston			
1863	Dwight, William	Bernardston			
1862	Dyer, Ezra	Philadelphia, Pa.			
1861	Eayrs, Charles G. A.	Lowell			
1863	Eddy, William	New Bedford			
1861	Edes, Robert Thaxter	Dorchester			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1863	Emerson, James	Ashby			
1855	Fabyan George	Boston			
1861	Fearing, Benjamin, Jr.	Wareham			
1858	Ferguson, Hugh	South Boston			
1858	Fifield, William C. B.	Dorchester			
1862	Fisher, Theodore Willis	——			
1855	Fiske, Daniel S.	East Brookfield			
1855	Flagg, Samuel B.	Boston			
1861	Fletcher, Samuel William	Pepperell			
1863	Fletcher, W. R.	Fitchburg			
1856	Fobes, Joseph B.	Hanover			
1856	Forsaith, Francis F.	Weymouth			
1859	Foss, Stephen	Boston			
1857	Foster, James M.	Springfield			
1862	Fox, John L.	U. S. N.			
1860	French, John O.	Hanover			
1860	Fuller, Henry H.	Lancaster			
1856	Gage, Daniel Parker	Lowell			
1856	Gale, George F.	Amherst			
1857	Galloupe, John S.	——, Ct.			
1858	Garland, George W.	Lawrence			
1859	Godding, William W.	Fitchburg			
1859	Goodell, Jonathan W.	Greenwich			
1861	Goodwin, Richard J. P.	Boston			
1859	Gould, Joseph F.	South Boston			
1859	Gould, Joshua B.	Templeton			
1861	Gray, Asa F.	Rowley			
1861	Gray, William	Tewksbury			
1858	Green, John	Boston			
1856	Green, Samuel A.	Boston			
1858	Griggs, Samuel	Westboro'			
1858	Griggs, Thomas T.	Grafton			
1859	Ham, Abner	Boston			
1863	Hammond, L. H.	Oakham			
1861	Harlow, John Martin	Woburn			
1859	Hartley, James W.	Fall River			
1861	Hartnett, Maurice K.	Boston			
1860	Harwood, Henry J.	Lowell			
1861	Haskell, Charles H.	S. Abington			
1856	Hatch, Horace	Brookline			
1855	*Haven, Samuel F., Jr.	Worcester		1863	32
1859	Hay, Gustavus	Boston			
1858	Hayward, John McLean	Boston			
1857	Hayward, Nathan, Jr.	Roxbury			
1858	Head, George E., Jr.	Boston			
1859	Heard, J. Theodore	Boston			
1855	Henderson, Jophanus	Somerville			
1856	Hill, Edward L.	Williamsburg			
1858	Hill, Gardner C.	Warwick			
1856	*Hill, James S.	Sacramento, Cal.		1857	32
1862	Holbrook, Silas P.	E. Douglass			
1855	Holcomb, Clifford C.	Lee			
1855	Holman, Silas A.	Taunton			
1859	Holmes, A. R.	New Bedford			
1858	Holmes, H. M.	South Adams			
1855	Hooker, Anson P.	E. Cambridge			
1859	Hooper, Frederick H.	New Bedford			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1860	Hoskins, Thomas H.	Boston			
1856	Hosmer, Alfred	Watertown			
1856	How, James C.	Haverhill			
1857	Howe, George M.	Harvard			
1862	Hoyt, Dixi Crosby	Milford			
1861	Hubbard, Henry B.	Taunton			
1860	Hubon, Peter E.	Worcester			
1859	Hurd, Samuel H.	Charlestown			
1856	Hurd, Yorick C.	Amesbury			
1858	Hutchins, John W.	Newton			
1856	Hyde, George S.	Boston			
1857	Janes, Henry	Waterbury, Vt.			
1858	Jeffries, B. Joy	Boston			
1854	Jenks, Thomas L.	Boston			
1856	Jewett, Charles C.	Holliston			
1861	Jewett, Fayette	———			
1863	Jones, Maurice E.	Westford			
1856	Jones, D. Wayland	Medfield			
1859	Jordan, Charles	South Reading			
1856	*Keep, Samuel H.	Boston		1863	30
1861	Kemp, H. E.	N. Prescott			
1855	*Kendall, Albert A.	Newton L. Falls		1862	34
1860	Kidder, Moses W.	Lowell			
1861	Kittredge, F. R. C.	Waltham			
1855	*Knight, Ebenezer	Brimfield		1857	68
1856	Kob, Charles F.	Kansas			
1856	Lamson, John A.	Boston			
1857	*Lane, William N.	Charlestown		1862	42
1856	Leach, William	Holmes's Hole			
1861	Lewis, F. B. A.	Watertown, N. Y.			
1855	Lincoln, Francis M.	Boston			
1859	Lincoln, George C.	South Malden			
1859	Livermore, Abel C.	Stow			
1863	Livingston, Alfred	Lowell			
1861	Lord, Friend Drake	Sterling			
1856	Lovejoy, Oliver S.	Haverhill			
1856	*Lynch, Thomas	South Boston		1857	25
1855	Lynde, James P.	Athol			
1858	Lyons, Charles T.	Coleraine			
1862	Manley, Edwin	N. Easton			
1859	Mansfield, John R.	New York			
1859	Manning, J. H.	Pittsfield			
1859	Marrisul, Felix V.	Fall River			
1858	Marsh, Lebbeus Eaton	Granby			
1855	Mason, William	Charlestown			
1860	Maunsell, G. N.	Harwich			
1856	McCollister, John Q. A.	South Groton			
1855	McLean, A. S.	Springfield			
1861	Meacham, Franklin	W. Stockbridge			
1861	Mead, M. S.	Northfield			
1859	Melcher, Samuel H.	Potosi, Mo.			
1859	*Mignault, Deodat	Lowell		1863	31
1860	Mills, C. D.	Pittsfield			
1855	Miner, D. W.	Ware			
1861	Mitchell, H. Hedge	Bridgewater			
1861	Moffatt, George T.	Boston			
1861	Moore, James M.	South Groton			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1854	Morong, Edward P.	Cahawba, Ala.			
1854	Morris, William B.	Charlestown			
1854	Morse, James R.	N. Cambridge			
1859	Murphy, Joseph	Taunton			
1856	Neilson, W.	Salem			
1863	Nelson, Abiel W.	Middleboro'			
1860	Nichols, George H.	Boston			
1856	Nichols, George K.	Sandisfield			
1859	Nichols, John T. G.	Cambridge			
1855	Nichols, Jonathan	Harvard			
1857	Nihill, John L.	Boston			
1857	Niles, John N.	Boston			
1861	O'Connell, Patrick A.	Boston			
1855	Oliver, Henry K.	Boston			
1858	Orcutt, Almon M.	Hardwick			
1862	Ordway, John Pond	Boston			
1856	Osgood, William	Boston			
1855	Otis, George A.	Springfield			
1855	Page, Calvin G.	Boston			
1856	Partridge, Louis E.	Natick			
1861	Pattee, Asa F.	W. Amesbury			
1861	Pease, Loren H.	Amherst			
1856	Perkins, D. C.	S. Danvers			
1855	*Perkins, John P.	Great Barrington		1856	
1860	Person, John W.	Lowell			
1859	Pierce, George W.	Leominster			
1858	Pike, Horace G.	Boston			
1859	Pillsbury, Harlin H.	Medford			
1861	Pillsbury, John M.	Lawrence			
1863	Pinkham, George Edwin	Lowell			
1859	Pinkerton, Thomas H.	Virginia City, U. T.			
1861	Plympton, Asahel A.	Shirley			
1861	Plympton, H. S.	New York			
1857	Potter, Albert	Burrillville, R. I.			
1858	Porter, Royal N.	Deerfield			
1859	Pouliot, Francis E. W.	Quebec, C. E.			
1861	Pratt, Henry	Lanesboro'			
1858	Prentiss, Henry Conant	Northampton			
1861	Prince, J. P.	Lynn			
1860	Prius, Peter	Lowell			
1859	Proctor, William B.	Lowell			
1860	Provan, Robert	Boston			
1863	Quimby, Elisha Hervey	Salem			
1857	Ranny, Mark	Somerville			
1855	Rice, I. Marcus	Worcester			
1861	Rice, William E.	Boston			
1861	Richards, James F.	Campello			
1855	Richardson, Horace	Boston			
1856	Richardson, John H.	Chesterfield			
1861	Ricketson, Arthur	New Bedford			
1858	Robinson, Albert B.	Holden			
1859	Robinson, J. Henry	Southboro'			
1859	Robinson, John L.	Wenham			
1860	Robinson, Marcus Tullius	Jamaica Plain			
1862	Robinson, Thad. Pulaski	Newton Centre			
1858	Rockwood, Henry	West Medway			
1855	Rogers, Seth	Worcester			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1858	Root, E. B.	W. Stockbridge			
1862	Roy, Joseph	Boston			
1856	Rublee, Chauncy M.	Montpelier, Vt.			
1858	Ruppaner, Antoine	Boston			
1860	Ryan, John	Charlestown			
1858	Sargent, George W.	Lawrence			
1857	Sargent, Lucius M., Jr.	Boston			
1859	Saville, Henry M.	Quincy			
1859	Sawyer, Edward J.	Gardner			
1856	Sawyer, Frederick A.	Greenfield			
1860	Sawyer, John W.	Madison, Wis.			
1858	Sawyer, Jeremiah H.	Newburyport			
1861	Seyffarth, Edmund	Lawrence			
1863	Shattuck, J. Chamberlain	Pepperell			
1860	Shaw, Henry Lyman	Boston			
1860	Sheldon, L. R.	Boston			
1861	Shipley, George T.	Boston			
1856	Simmons, Gustavus L.	Sacramento, Cal.			
1858	Sinclair, Alexander D.	Boston			
1854	Smith, Abner M.	Pittsfield			
1856	Smith, Andrew M.	Williamstown			
1855	*Smith, Albert D.	Holden		1858	36
1856	Smith, G. O.	Haverhill			
1858	Smith, Jerome C.	New York			
1859	Smyth, James	Boston			
1863	Snow, Jesse W.	Danvers			
1858	Soule, Horatio S.	Winthrop			
1861	Spaulding, Reuben	Hatfield			
1863	Spofford, Morris	Groveland			
1860	Sprague, Francis P.	Boston			
1857	Spring, Charles H.	Boston			
1856	Spring, John	Dublin, Ireland			
1860	Stearns, Henry P.	Hartford, Ct.			
1860	Stearns, John, Jr.	Boston			
1855	Stedman, Charles E.	Dorchester			
1856	*Stetson, A. Everett	Dorchester		1858	32
1859	Stevens, Francis J.	Haverhill			
1861	Stiles, R. Cresson	Pittsfield			
1862	Street, Charles Carroll	Boston			
1858	Strickland, Rial	Enfield, Ct.			
1857	Stuart, Absalom B.	West Hampton			
1862	Sturtevant, Charles	New Bedford			
1861	Stone, Silas E.	Walpole			
1858	Taylor, John D.	Boston			
1858	Temple, Cyrus	Heath			
1857	Temple, Theron	Ashburnham			
1857	Thompson, Austin W.	Northampton			
1861	Thompson, George F.	Belchertown			
1858	Thorndike, William	Beverly			
1857	Tinker, Martin A.	Burnt Hills, N. Y.			
1857	Tjader, Antoun W.	Boston			
1861	Topliff, Charles C.	Lunenburg			
1861	Tower, Charles C.	S. Weymouth			
1859	Towle, Samuel K.	Haverhill			
1857	Tracy, Stephen	Andover			
1863	Tripp, B. H.	Rutland			
1855	Trow, Nathaniel G.	Sunderland			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1855	Tucker, George G.	Westfield			
1859	Tuttle, Charles M.	New Bedford			
1859	Tyler, John E.	Somerville			
1855	Tyler, Warren	N. Brookfield			
1858	Underwood, George L.	New York			
1855	Wakefield, Adoniram J.	Hopkinton			
1856	Wakefield, Jonas F.	South Malden			
1855	Walker, Clement A.	South Boston			
1855	Walsh, John D.	Boston			
1858	Walsh, Peter D.	Boston			
1859	Walsh, Walter M.	Boston			
1863	Ward, George A.	Holyoke			
1863	Ward, George Whitfield	Upton			
1863	Ward, Saxton P.	New Braintree			
1856	*Ware, Robert	Boston		1863	29
1860	Warren, Charles	Charlestown			
1861	Warren, Oren	W. Newbury			
1859	Webster, Joseph R.	Milton			
1856	Weeks, Charles M.	Boston			
1858	Wells, Noah	Greenfield			
1856	*Wellman, James R.	Fitchburg		1862	32
1861	West, Joseph O.	Princeton			
1855	Wheatland, Richard H.	Salem			
1856	White, James C.	Boston			
1860	White, Samuel	Springfield			
1860	White, Whitman B.	Curtisville			
1855	Whiting, I. B.	Janesville, Wis.			
1861	Whittemore, George K.	Lowell			
1856	Whittemore, Henry F.	Marblehead			
1861	Willard, Josiah N.	Boston			
1861	Williams, A. A. C.	Pittsfield			
1861	Willis, Lemuel Murray	Marblehead			
1858	Windship, George B.	Roxbury			
1863	Winslow, Joseph W.	East Hampton			
1855	Winsor, Frederic	Boston			
1860	Witter, John	Brimfield			
1856	Wood, Franklin A.	Lunenburg			
1855	Wood, James A.	Boston			
1855	Woodbury, Elwell	Medford			
1855	Woodward, Rufus	Worcester			
1861	Wright, Eliphalet	Lee			
1855	Yale, John	Ware			

Gentlemen will please notify the Recording Secretary of any errors, omissions or removals.

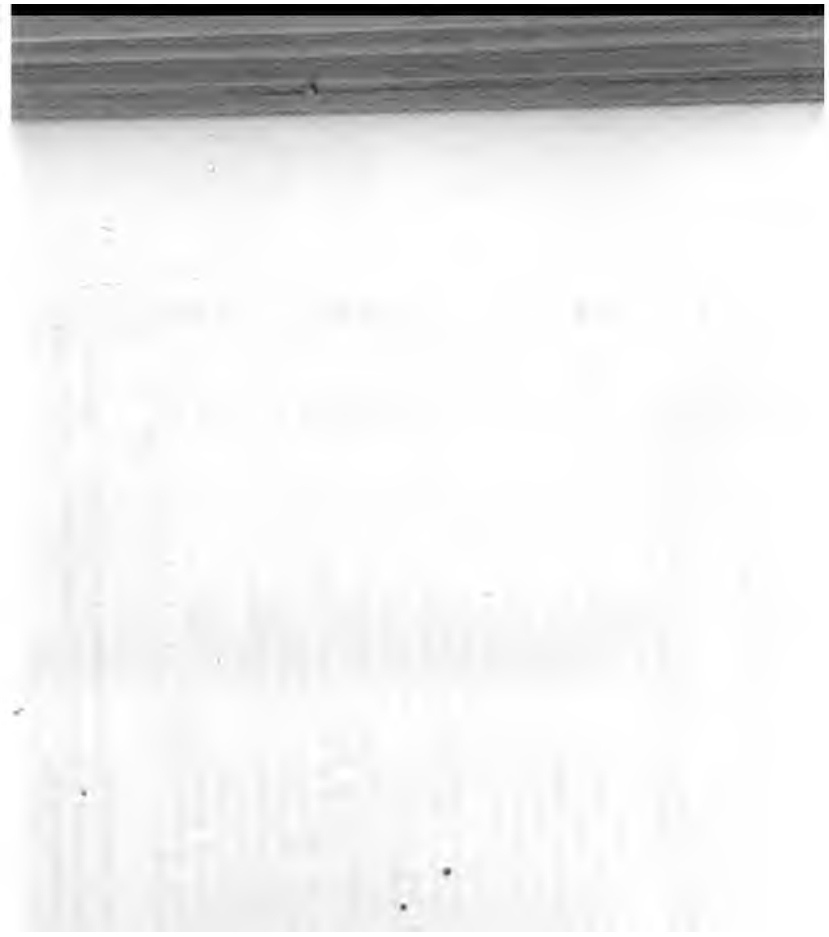
DIPLOMAS can be obtained by application to the Recording Secretary, enclosing the sum of One Dollar. (See By-Law No. IV.)

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1858	Root, E. B.	W. Stockbridge			
1862	Roy, Joseph	Boston			
1856	Rublee, Chauncy M.	Montpelier, Vt.			
1858	Ruppaner, Antoine	Boston			
1860	Ryan, John	Charlestown			
1858	Sargent, George W.	Lawrence			
1857	Sargent, Lucius M., Jr.	Boston			
1859	Saville, Henry M.	Quincy			
1859	Sawyer, Edward J.	Gardner			
1856	Sawyer, Frederick A.	Greenfield			
1860	Sawyer, John W.	Madison, Wis.			
1858	Sawyer, Jeremiah H.	Newburyport			
1861	Seyffarth, Edmund	Lawrence			
1863	Shattuck, J. Chamberlain	Pepperell			
1860	Shaw, Henry Lyman	Boston			
1860	Sheldon, L. R.	Boston			
1861	Shipley, George T.	Boston			
1856	Simmons, Gustavus L.	Sacramento, Cal.			
1858	Sinclair, Alexander D.	Boston			
1854	Smith, Abner M.	Pittsfield			
1856	Smith, Andrew M.	Williamstown			
1855	*Smith, Albert D.	Holden		1858	36
1856	Smith, G. O.	Haverhill			
1858	Smith, Jerome C.	New York			
1859	Smyth, James	Boston			
1863	Snow, Jesse W.	Danvers			
1858	Soule, Horatio S.	Winthrop			
1861	Spaulding, Reuben	Hatfield			
1863	Spofford, Morris	Groveland			
1860	Sprague, Francis P.	Boston			
1857	Spring, Charles H.	Boston			
1856	Spring, John	Dublin, Ireland			
1860	Stearns, Henry P.	Hartford, Ct.			
1860	Stearns, John, Jr.	Boston			
1855	Stedman, Charles E.	Dorchester			
1856	*Stetson, A. Everett	Dorchester		1858	32
1859	Stevens, Francis J.	Haverhill			
1861	Stiles, R. Cresson	Pittsfield			
1862	Street, Charles Carroll	Boston			
1858	Strickland, Rial	Enfield, Ct.			
1857	Stuart, Absalom B.	West Hampton			
1862	Sturtevant, Charles	New Bedford			
1861	Stone, Silas E.	Walpole			
1858	Taylor, John D.	Boston			
1858	Temple, Cyrus	Heath			
1857	Temple, Theron	Ashburnham			
1857	Thompson, Austin W.	Northampton			
1861	Thompson, George F.	Belchertown			
1858	Thorndike, William	Beverly			
1857	Tinker, Martin A.	Burnt Hills, N. Y.			
1857	Tjader, Antoun W.	Boston			
1861	Topliff, Charles C.	Lunenburg			
1861	Tower, Charles C.	S. Weymouth			
1859	Towle, Samuel K.	Haverhill			
1857	Tracy, Stephen	Andover			
1863	Tripp, B. H.	Rutland			
1855	Trow, Nathaniel G.	Sunderland			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1855	Tucker, George G.	Westfield			
1859	Tuttle, Charles M.	New Bedford			
1859	Tyler, John E.	Somerville			
1855	Tyler, Warren	N. Brookfield			
1858	Underwood, George L.	New York			
1855	Wakefield, Adoniram J.	Hopkinton			
1856	Wakefield, Jonas F.	South Malden			
1855	Walker, Clement A.	South Boston			
1855	Walsh, John D.	Boston			
1858	Walsh, Peter D.	Boston			
1859	Walsh, Walter M.	Boston			
1863	Ward, George A.	Holyoke			
1863	Ward, George Whitfield	Upton			
1863	Ward, Saxton P.	New Braintree			
1856	*Ware, Robert	Boston		1863	29
1860	Warren, Charles	Charlestown			
1861	Warren, Oren	W. Newbury			
1859	Webster, Joseph R.	Milton			
1856	Weeks, Charles M.	Boston			
1858	Wells, Noah	Greenfield			
1856	*Wellman, James R.	Fitchburg		1862	32
1861	West, Joseph O.	Princeton			
1855	Wheatland, Richard H.	Salem			
1856	White, James C.	Boston			
1860	White, Samuel	Springfield			
1860	White, Whitman B.	Curtisville			
1855	Whiting, I. B.	Janesville, Wis.			
1861	Whittemore, George K.	Lowell			
1856	Whittemore, Henry F.	Marblehead			
1861	Willard, Josiah N.	Boston			
1861	Williams, A. A. C.	Pittsfield			
1861	Willis, Lemuel Murray	Marblehead			
1858	Windship, George B.	Roxbury			
1863	Winslow, Joseph W.	East Hampton			
1855	Winsor, Frederic	Boston			
1860	Witter, John	Brimfield			
1856	Wood, Franklin A.	Lunenburg			
1855	Wood, James A.	Boston			
1855	Woodbury, Elwell	Medford			
1855	Woodward, Rufus	Worcester			
1861	Wright, Eliphalet	Lee			
1855	Yale, John	Ware			

Gentlemen will please notify the Recording Secretary of any errors, omissions or removals.

DIPLOMAS can be obtained by application to the Recording Secretary, enclosing the sum of One Dollar. (See By-Law No. IV.)



PROCEEDINGS OF THE COUNCILLORS.

October Meeting, 1863.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held at the Room, in Temple Place, Boston, on Wednesday, October 5th, 1863, at 11 o'clock, A.M.

The President, Dr. Josiah Bartlett, in the Chair.

The following Councillors were present:—

Essex North.
Oliver S. Lovejoy,
Martin Root.

Essex South.
Ebenezer Hunt,
Augustus Torrey.

Middlesex North.
E. A. Perkins,
C. A. Savory.

Middlesex East.
J. D. Mansfield,
H. P. Wakefield.

Middlesex South.
Josiah Bartlett,
Henry Cowles,
Howland Holmes,
Enos Hoyt,
J. B Taylor.

Norfolk.
B. E. Cotting,
Edward Jarvis,
Benjamin Mann.

Plymouth.
Asa Millett.

Suffolk.
S. L. Abbot,
Geo. Bartlett,
Jacob Bigelow,
S. Cabot,
P. M. Crane,
J. C. Dalton,
Henry Dyer,
J. B. Forsyth,
A. A. Gould,
John Homans,
J. B. S. Jackson,
John Jeffries,
Francis Minot,
W. W. Morland,
S. Morrill,
Ezra Palmer,
C. G. Putnam,
D. H. Storer,
C. E. Ware,
J. M. Warren,
A. A. Watson.

Worcester North.
T. R. Boutelle,
David Parker.

The Secretary read the records of the last meeting, being those of the Annual Meeting, holden at Pittsfield, June 10th, 1863.

At this juncture, Dr. John Jeffries announced to the Council the death of Dr. George Hayward, Sen., within the previous thirty minutes, from apoplexy. The Councillors were deeply impressed by this sudden and most unexpected announcement.

On motion of Dr. J. C. Dalton, of Boston, a Committee was appointed to consider this startling news, and to draw up resolutions, to be presented to the Councillors during their session. The President appointed Drs. Dalton, Jeffries and J. M. Warren, who subsequently reported as follows:—

"The Committee appointed to consider what order should be taken in relation to the announcement, just made by Dr. Jeffries, of the sudden death, since the opening of this meeting, of Dr. Geo. Hayward, former President of this Society, and for a long series of years an active and efficient member, recommend that a Committee be appointed to adopt such measures as may, on consultation with Dr. James Jackson, Dr. Jacob Bigelow, the officers of this Society, and such others as they may please to consult, seem appropriate to the sad occasion."

The President reappointed the same gentlemen to act as this Committee.*

---

* The Committee, finding that it was the express desire of Dr. Hayward that no public demonstration be made by his medical associates, at his funeral, in pursuance of this vote prepared the following resolutions:—

Resolved, "That in the death of Dr. George Hayward, the Massachusetts Medical Society has sustained the loss of a prominent, faithful and efficient member.

Resolved, "That we gratefully recognize those particular traits of medical character, which, during a long and useful professional career, made him not only prominent in this Society, but serviceable to the profession at large. These features appear in his great fondness for his profession and his high appreciation of its dignity and importance; in his clear and distinct recognition of fixed principles in medicine and surgery; in his readiness to assail each false dogma in medicine, and his deep dislike of every form of empiricism; and in his sanguine disposition, which gave earnestness and energy to his general character.

Resolved, "That we recognize the practical application of these prominent features of his medical character, in the faithfulness of his personal attentions to the sick; in his important services to this Society while a member of the Council, for

The Treasurer, Dr. Minot, reported that the Committee on the transfer of the late Treasurer's accounts, had decided that the Treasurers hereafter should give bonds for the fulfilment of their trust.

On motion of Dr. Gould, the Committee on Finance were authorized to fix the amount of bonds to be given.

Dr. Jacob Bigelow gave some account of the circumstances of Dr. Hayward's illness and death; after which, on motion, the Councillors adjourned, at 12¼ o'clock, P.M.

WM. W. MORLAND,
Recording Secretary.

FEBRUARY MEETING, 1864.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held at the Room, in Temple Place, Boston, on Wednesday, February 3d, 1864, at 11 o'clock, A.M.

The President, Dr. JOSIAH BARTLETT, in the Chair.

The following Councillors were present:—

---

a long series of years, as shown by his able and valuable reports on various subjects, and by the dignity, hospitality and propriety of his course when President of the Society; in his early and continued interest in the Massachusetts General Hospital, and his long and successful career as a surgeon of that institution; in his usefulness to this community as a member, for many years, of the Board of Consulting Physicians for the city—especially at the time of the first invasion of Asiatic cholera; in the public benefit more recently conferred by his strict fidelity as chairman of the Board of Examiners for Military Surgeons—by which the reputation of those entering the service from this Commonwealth has been pre-eminent; in his early use of the anæsthetic agents in surgery, and his earnest efforts, at home and abroad, to lead the profession to make use only of that one which is the safest and best; in his fostering care of students of medicine, and his faithful instructions to them while occupying a professor's chair.

"Nor would we forget his labors for Harvard College, and other literary and scientific associations which have thrown a reflex honor upon the medical profession.

Resolved, "That, by this slight recognition of some parts of his useful career, we are reminded that we have lost an honored associate and an esteemed friend.

Resolved, "That a copy of these resolutions be sent by the Secretary of the Society to his family, with whom we deeply sympathize in their loss, to the Boston Medical and Surgical Journal, and to some of the city newspapers."

J. C. DALTON,
JOHN JEFFRIES,
J. MASON WARREN,
} *Committee.*

Bristol South.
W. W. Comstock,
Foster Hooper,
C. D. Stickney.

Essex North.
Martin Root.

Essex South.
Benjamin Cox,
Ebenezer Hunt,
J. M. Nye,
Augustus Torrey.

Middlesex North.
J. C. Bartlett.

Middlesex East.
Alonzo Chapin,
Ephraim Cutter,
J. D. Mansfield,
H. P. Wakefield.

Middlesex South.
C. H. Allen,
Josiah Bartlett,
Howland Holmes,
Enos Hoyt.

Norfolk.
Ebenezer Alden,
B. E. Cotting,
J. G. S. Hitchcock,
Edward Jarvis,
Benjamin Mann,
Ebenezer Stone.

Plymouth.
Asa Millett,
S. A. Orr.

Suffolk.
J. Ayer,
Geo. Bartlett,
H. I. Bowditch,
Samuel Cabot,
W. E. Coale,
P. M. Crane,
Henry Dyer,
John Flint,
J. B. Forsyth,
A. B. Hall,
George Hayward,
John Homans,
John Jeffries,
Francis Minot,
W. W. Morland,
Samuel Morrill,
Ezra Palmer,
D. H. Storer,
C. E. Ware,
J. M. Warren,
J. W. Warren.

The following Committees were appointed by the Chair:—

On the Treasurer's accounts—Drs. A. A. Gould and P. M. Crane, of Boston.

On the Library and Cabinet—Drs. N. B. Shurtleff and E. H. Clarke, of Boston.

The Secretary read a letter from Col. Henry Lee, Jr., announcing the following bequest to the Society from Mrs. Louisa Lee Waterhouse:—"I give to the Massachusetts Medical Society my engraving of the London Medical Society." Accompanying the above bequest was a gift from Col. Lee, in the following terms:—"To which I beg leave to add an engraved portrait of Dr. Jenner, on the back of which is pasted a key to the London Medical Society, and there is also a sort of prospectus or advertisement of the London Jennerian Society, which may be thought interesting, and so I give it."

On motion of Dr. Hoyt, of Framingham, these gifts were accepted by a unanimous vote. A vote of thanks was also passed to Col. Lee, a copy of which the Secretary was directed to forward to him, signed by the President of the Society.

The Secretary laid before the Councillors a paper presented to the Society at their last annual meeting by Dr. Swinburne, of Albany, N. Y., and which was then referred to the Councillors; subject of the paper—"The Ambulance Service;" the paper was placed on file.

On motion of Dr. J. M. Warren, of Boston, amended by Dr. A. Chapin, of Winchester, it was voted that four hundred dollars be appropriated from the Society's funds towards the expense of a dinner, and that a further sum be applied from the same source if necessary.

Dr. J. Homans referred to the death of Dr. J. C. Dalton, with tributary remarks, and moved that a Committee be appointed to draft resolutions expressing the appreciation of the Councillors of their late associate.

Dr. C. H. Allen, of Cambridge, seconded the motion, and warmly expressed his sense of Dr. Dalton's worth, and of the loss sustained by the profession and the community in his death.

Dr. Jarvis, of Dorchester, followed with remarks of a similar nature.

Dr. J. M. Warren spoke of Dr. Dalton's last expressions of respect for the medical profession, and also mentioned his wish that a post-mortem examination should be made in his case, in furtherance of the interests of the science.

The President referred to the intimate and delightful relations which he had with the late Dr. Dalton.

Dr. Bowditch, of Boston, alluded to the last hours of Dr. Dalton; throughout he showed himself a brave and high-minded man. His last advice to his sons was, never to

do anything of which they would be ashamed on their ath-beds.

Dr. A. Chapin said he was more than satisfied with the otion and remarks. He expressed his great respect for . Dalton's character and abilities, and alluded to his ed conscientiousness, as a distinguishing feature.

In accordance with the motion made by Dr. Homans, the wing gentlemen were appointed a Committee to draft oposed resolutions:—Dr. J. Homans, of Boston; Dr. Allen, of Cambridge; Dr. Jarvis, of Dorchester.

urned, at 5 minutes past 12 o'clock.

WM. W. MORLAND,
Recording Secretary.

ANNUAL MEETING, MAY 24th, 1864.

Annual Meeting of the Councillors was held at the m, in Temple Place, Boston, on Tuesday evening, May 24th, 1864, at 7½ o'clock.

The President, Dr. JOSIAH BARTLETT, in the Chair.

The following Councillors were present:—

Barnstable.
E. W. Carpenter.

Berkshire.
H. H. Childs,
J. Leland Miller.

Bristol North.
Charles Howe,
Thaddeus Phelps.

Bristol South.
W. W. Comstock,
Andrew Mackie,
C. D. Stickney.

Essex North.
Martin Root.

Essex South.
Ebenezer Hunt,
Jas. M. Nye.

Hampden.
Nathan Adams,
Alvan Smith,
John Witter.

Middlesex North.
J C. Bartlett,
C A Savory.

Middlesex East.
Alonzo Chapin,
Ephraim Cutter,
J. D. Mansfield,
H. P. Wakefield.

Middlesex South.
Josiah Bartlett,
Howland Holmes,
Anson Hooker,
Enos Hoyt.

Norfolk.
J. G S. Hitchcock,
C. C. Holmes,
Edward Jarvis

Suffolk.
James Ayer,

Jacob Bigelow,	John Homans,	*Worcester.*
H. J. Bigelow,	J. B. S. Jackson,	
H. I. Bowditch,	John Jeffries,	Nelson Carpenter,
Samuel Cabot,	J. S. Jones,	H. A. Jewett,
W. E. Coale,	Francis Minot,	M. D. Southwick.
P. M. Crane,	W. W. Morland,	
John Flint,	Ezra Palmer,	*Worcester North.*
E. B. Forsyth,	G. C. Shattuck,	
A. A. Gould,	C. E. Ware,	T. R. Boutelle,
A. B. Hall,	J. W. Warren,	C. C. Field,
Geo. Hayward,	A. A. Watson.	Calvin P. Fiske.

The Secretary read the Record of the preceding meeting.

The Secretary read the names of the Fellows admitted and of the Fellows deceased during the year.

The Treasurer read his Annual Report, which was accepted.

Dr. P. M. Crane read the Auditor's Report, and the same was accepted.

The Librarian reported that the Library was in its usual condition.

Dr. A. A. Gould, Chairman of the Committee on Membership and Resignations, reported the names of the following Fellows to be placed on the *retired* list:—Drs. Henry Ferre, of Dalton; Worham L. Fitch, of Springfield; Benoni Carpenter, of Pawtucket; Stephen Bates, of Charlemont; Joseph Palmer, of Boston; and Samuel Richardson, of Watertown. These Fellows, having arrived at the age of sixty, and having paid their dues, it is recommended that they be recognized as Retired Members. The report was accepted, and the aforesaid members were retired.

The Recording Secretary declined re-election.

The following Fellows were appointed by the Chair a Committee on Nominations:—

Barnstable, ...	Dr. Carpenter,
Berkshire, ...	" Childs,
Bristol North, ...	" Howe,

Bristol South,	Dr. Mackie,
Essex North,	" Root,
Essex South,	" Hunt,
Hampden,	" Adams,
Middlesex North,	" Savory,
Middlesex East,	" Cutter,
Norfolk,	" Jarvis,
Suffolk,	" Putnam,
Worcester,	" Carpenter.

The Committee on Nominations were instructed to report the names of candidates for Anniversary Chairman and Orator for the next Annual Meeting.

On motion of Dr. A. B. Hall, it was

Voted, "That the next Annual Meeting be held in the City of Boston."

Dr. John Homans proposed that the Society hold a meeting of *two* days, instead of one, in future.

The proposal was advocated by Dr. Miller, of Pittsfield, who referred to the fact that two and even three days were devoted to similar meetings in other States.

Dr. Chapin, of Winchester, spoke in favor of extending the time to two days. He thought that this Society did not effect enough; that it did not keep pace with other younger societies. Dr. Chapin moved that a Committee be appointed to consider the subject, and report at a subsequent meeting.

The Chair appointed Drs. John Homans of Boston, Chapin of Winchester, and Miller of Pittsfield, as this Committee.

On motion of Dr. Calvin P. Fiske, of Fiskedale, amended by Dr. Chapin, of Winchester, it was also voted to refer to the above Committee the By-laws relating to the examination, by the Censors, of candidates for membership in the Society, and also the Resolution offered and passed last year in relation to the same subject, for them to consider and recommend such action in the matter as seems to them advisable.

Dr. John Homans, of Boston, for the Committee appointed at the February meeting to draft resolutions of respect to the memory of the late Dr. J. C. Dalton, read the following Resolutions and remarks:—

The Committee appointed at the last stated meeting of the Councillors "to express the sense of their loss in the death of the late Dr. John C. Dalton, and to furnish some resolutions significant of their appreciation of so valuable a member," beg leave to submit the following Report:—

Resolved, "That in the long life of Dr. J. C. Dalton, the Massachusetts Medical Society and the community have enjoyed the companionship, the services and the co-operation of a gentleman of the strictest purity and integrity, of generous sympathies and unfaltering honor, of high literary and scientific attainments, and a physician of wisdom and extensive usefulness.

Resolved, "That in his death this Society has lost an honorable, devoted, learned and beloved associate, whose high and unswerving principles and deep and intelligent interest in the profession and in humanity, have secured him the appreciative confidence of the community among whom he lived and labored, whose pure and amiable character won for him the love and respect of a wide circle of friends, and whose scientific acquirements, professional skill and honorable bearing had gained for him the unfaltering and abiding esteem of society and of the medical profession to whom he was known.

Resolved, "That the Massachusetts Medical Society deeply sympathizes with the family of Dr. Dalton, and offer their warm condolence in this their hour of trial, and the assurance that the memory of his beautiful and effective life will long remain in their hearts, a monument of a respected and beloved associate."

(Signed) JOHN HOMANS,
EDWARD JARVIS,
CHAS. H. ALLEN.

The Report was accepted, a copy was ordered to be placed on file, and a copy of the Resolutions to be sent to the family of Dr. Dalton.

The following Committees were appointed by the Chair:

On Publications—Drs. C. G. Putnam and G. C. Shattuck, of Boston; Dr. B. E. Cotting, of Roxbury.

On Finance—Drs. John Homans and S. Durkee, of Boston; Dr. P. M. Crane, of East Boston.

On Memberships and Resignations—Drs. James Ayer, Francis Minot and Calvin Ellis, of Boston.

Dr. Childs, of Pittsfield, Chairman of the Committee on Nominations, reported the following list of officers, and they were unanimously elected by ballot:—

President, ...	Dr. A. A. Gould, Boston.
Vice President, . . .	" H. L. Sabin, Williamstown.
Corresponding Secretary,	" W. E. Coale, Boston.
Recording "	" Chas. D. Homans, "
Librarian, ...	" J. C. White, "
Treasurer, ...	" Francis Minot, "

The same Committee also reported the following nominations:—

For Anniversary Chairman,	Dr. W. E. Coale, Boston.
" *Orator*, ...	" B. E. Cotting, Roxbury.

And they were duly elected by ballot.

The following gentlemen were nominated by the Chair, as delegates to the meetings of different State Societies for the current year:—

To the New Hampshire Medical Society.

Drs. A. B. Hall, ...	Boston.
H. C. Perkins, ...	Newburyport.
Ephraim Cutter, . . .	Woburn.

To the Maine Medical Society.

Drs. George Fabyan, . . .	Boston.
Jonathan Ware, . . .	Milton.

To the Vermont Medical Society.

Drs. H. I. Bowditch, . . .	Boston.
T. R. Boutelle, . . .	Fitchburg.
J. M. Harlow, . . .	Woburn.

To the Connecticut Medical Society.

Drs. G. C. Shattuck, . . .	Boston.
Calvin P. Fiske, . . .	Fiskedale.

To the Rhode Island Medical Society.

Drs. J. Bartlett, ...	Concord.
H. W. Williams, . . .	Boston.

To the New York Medical Society.

Drs. H. H. Childs,	Pittsfield.
J. L. Miller,	"
C. T. Collins,	Great Barrington.
Foster Hooper,	Fall River.

To the New Jersey Medical Society.

Drs. John Homans,	Boston.
B. E. Cotting,	Roxbury.

The President, Dr. Josiah Bartlett, of Concord, on retiring from the Chair, expressed himself in grateful terms of acknowledgment to the Fellows for the uniform courtesy and kindness they had always extended to him during his term of office. The fulfilment of his duties had been to him a pleasure rather than a burden. He desired Drs. Childs and Jeffries to escort the President elect to the Chair.

Dr. A. A. Gould, the President elect, on taking the Chair, made his acknowledgments to the Councillors for the distinguished honor they had done him, and said that his best efforts should be given to the discharge of the duties of so important and honorable a position.

On motion of Dr. John Homans, the thanks of the Councillors were unanimously voted to the retiring President for the faithful and devoted services rendered by him during his occupancy of the Chair.

At 10 minutes past 10 o'clock, P.M., the meeting was dissolved.

WM. W. MORLAND,
Recording Secretary.

Omitted in Record of February Meeting.

The Committee on Membership and Resignations reported in favor of the election of Prof. Dixi Crosby, of Hanover, N. H., to Honorary Membership, as proposed at the last stated meeting by Dr. Hoyt of Framingham and Dr. Cowles of Saxonville, and he was duly elected.

Massachusetts Medical Society.

PROCEEDINGS OF THE SOCIETY.

ANNUAL MEETING.

MAY 25th, 1864.

THE Annual Meeting of the Society was held in the Common Council Room, in the Hall of the Massachusetts Charitable Mechanic Association, on Wednesday, May 25th, 1864, at 10 o'clock, A.M.

During the temporary absence of Dr. A. A. Gould, the President, the meeting was called to order by the Recording Secretary; and Dr. Andrew Mackie, of New Bedford, was unanimously chosen President, *pro tem.*

The Secretary read the record of the preceding meeting, and laid before the Society the record of the Councillors for the preceding year.

The Secretary read the names of those who have become Fellows since the last Annual Meeting, and of those Fellows who have died during the year.

Fellows admitted since June, 1863.

Charles Gilbert Allen, . . .	Barre.
Charles W. Barnes, . . .	Grafton.
Francis F. Brown, . . .	Winchester.
Alfred R. Bullard, . . .	Holliston.
Orvis O. Davis, ...	N. Andover.

John Henry Denny,	Somerville.
George E. Frothingham,	N. Becket.
Trefle Garceau,	Charlestown.
James Sumner Greene,	Milton.
Nathaniel Greene, Jr.	Boston.
W. W. Greene,	Pittsfield.
John Milton Grosvenor,	Woburn.
H. T. Hanks,	Royalston.
Thomas B. Hitchcock,	Boston.
John F. Hurley,	Boston.
P. P. Ingalls,	S. Boston.
Edward Dillon Ireland,	Lowell.
Arthur Kemble,	Salem.
David Mack, Jr.	U. S. N.
William Basilio Mackie,	Boston.
James Augustin McLaughlin,	Boston.
John J. McSheehy,	U. S. A.
Alfred Montville,	Hatfield.
Curtis Emerson Munn,	Westfield.
Nomus Paige,	Taunton.
Edgar Parker,	Saxonville.
Elisha Harvey Quimby,	Salem.
N. M. Ransom,	W. Stockbridge.
Joseph Brown Reynolds,	Concord.
Frank H. Rice,	Worcester.
Eugene Patterson Robbins,	Boston.
Michael Roberts,	Lawrence.
James T. Rood,	Brookfield.
George Francis Shattuck,	Pepperell.
Joseph Stedman,	Jamaica Plain.
Horatio G. Stickney,	Springfield.
Oscar F. Swasey,	Beverly.
Joshua Brackett Treadwell,	Boston.
James Edwin Walker,	Boston.
John Warren Willis,	Waltham.
Benjamin F. Wilson,	New Bedford.
Joseph W. Winslow,	East Hampton.

Honorary Member.

Dixi Crosby,	Hanover, N. H.

Fellows deceased since June, 1863.

Admitted.	Name.	Residence.	Date of Decease.	Age.
1844	ALANSON ABBE	Boston	April 14, 1864	69
1839	JASON H. ARCHER	Wrentham	Jan. 22, 1864	69
1830	*FRANCIS BOOTT	London, Eng.	Dec. 25, 1863	72
1849	BENJ. F. BURGESS	Wareham	Jan. 5, 1864	40
1841	ERASTUS H. CLAPP	Wrentham	Aug. 7, 1863	49
1845	MOSES CLARK	East Cambridge	March 27, 1864	46
1829	AARON CORNISH	New Bedford	April 10, 1864	74
1851	ARIAL I. CUMMINGS	Roxbury	Sept. 9, 1863	40
1831	BENJAMIN CUTTER	Woburn	March 9, 1864	61
1823	JOHN C. DALTON	Boston	Jan. 8, 1864	68
1862	CHARLES EDSON DAVIS	Ashburnham	1864	41
1821	TIMOTHY FISKE	Holliston	Dec. 16, 1863	85
1829	JOSHUA B. FLINT	Louisville, Ky.	Mar. 19, 1864	62
1852	LEMUEL FULLER	North Weymouth	1864	51
1862	CHARLES H. HASKELL	South Abington	Nov. 10, 1863	31
1816	GEORGE HAYWARD	Boston	Oct. 7, 1863	73
1837	*S. P. HILDRETH	Marietta, O.	July 24, 1863	80
1840	C. G. HOLBROOK	South Abington	Sept. 21, 1863	57
1822	VINCENT HOLCOMB	W. Granville	Sept. 16, 1863	68
1839	SELDEN JENNINGS	Richmond	April 15, 1864	50
1855	SAMUEL H. KEEP	Boston	Sept. 30, 1863	30
1844	S. D. KING	Lunenburg	October, 1863	76
1847	M. A. MOORE	Waltham	Mar. 30, 1864	39
1837	CHARLES MCALLISTER	Stockbridge	1864	70
1859	J. H. MANNING	Pittsfield	1863	—
1826	JOHN NELSON	Woburn	Mar. 22, 1864	74
1839	OTIS PERHAM	Lowell	1863	50
1856	D. C. PERKINS	South Danvers	Nov. 3, 1863	39
1861	H. S. PLYMPTON	Cambridge	Sept. 25, 1863	25
1863	EUGENE P. ROBBINS	Boston	Nov. 27, 1863	—
1860	M. T. ROBINSON	Jamaica Plain	Mar. 13, 1864	51
1815	DEAN ROBINSON	West Newbury	Aug. 22, 1863	75
1854	DAVID ROBERTS	Boston	Aug. 15, 1863	36
1836	JOHN STEVENS	Boston	July 10, 1863	74
1847	JAMES W. STONE	Boston	Aug. 22, 1863	40
1846	JOHN A. TARBELL	Boston	Jan. 21, 1864	—
1838	THOMAS K. THOMAS	S. Beddington, Me	Nov. 7, 1863	—
1820	JOHN WARE	Boston	April 29, 1864	68
1853	IRA WARREN	Boston	May 20, 1864	59
1826	CHARLES WILD	Brookline	1864	69
1826	ABEL WILDER	Blackstone	1863	—
1855	R. H. WHEATLAND	Salem	Dec. 21, 1863	33
1826	JAMES M. WHITTEMORE	Brighton	Dec. 7, 1863	68
1851	ISAAC P. WILLIS	Royalston	1863	56

* *Honorary Members.*

The Secretary announced the name of Dr. John Ordronaux, of New York, as an accredited delegate from the New York State Medical Society, to this meeting.

The President, Dr. Gould, having now arrived and taken the Chair, introduced Dr. Ordronaux to the Society, who

expressed his gratification at being present as a delegate from the New York Medical Society. He alluded to the efforts made by the Society which he represented to advance the interests of medical science, and paid a handsome compliment to the record of the Massachusetts Medical Society in the same direction. He also referred to the injury done to the Medical Schools in New York by the long-continued war. He then addressed the Society at some length and in a very interesting manner upon the important topic of the "Future disposition to be made of our disabled soldiers."

On motion of Dr. Howe, of Taunton, it was

Voted, "That Dr. Ordronaux be requested to reduce his very interesting and valuable remarks to writing, that they may go into the hands of the Publishing Committee, and appear in the Annual Communications of this Society."

Dr. Mauran, of Providence, R. I., delegate from the Rhode Island State Medical Society, was presented to the Society by the President, and briefly addressed the meeting. A note was also received from Dr. Satterlee, of New York, regretting his inability to attend the meeting, as a delegate.

The Treasurer read his Annual Report, which was accepted, and ordered to be placed on file.

Treasurer's Report.

THE Treasurer has the honor to submit the following Report:

The amount of money received by him for the Society during the past year, was fourteen thousand six hundred and seventy three dollars and sixty-nine cents ($14,673.69). The amount paid was fourteen thousand two hundred and thirty-two dollars and thirty-seven cents ($14,232.37); leaving a balance in his hands of four hundred and forty-one dollars and thirty-two cents ($441.32). The principal items of receipt and expenditure will be found in the Analysis Account hereto annexed. (See p. 112.)

The Society's debt is as follows:—

Notes payable, viz.:

Heirs of L. V. Bell,	$1,000.00	
A. A. Gould,	767.40	
		1,767.40
David Clapp's bill,		440.00
		$2,207.40

The absence of a large number of the Fellows in the Army still continues to diminish the amount of our annual receipts, and it is owing to this fact, and to the increased cost of our Publications, &c., that the debt has been so little reduced during the past year.

The property of the Society is as follows:—

Permanent Fund,	$11,253.30
Shattuck Fund,	9,166.87
Phillips Fund,	10,000.00
Cash,	441.32
	$30,861.49

Respectfully submitted.

FRANCIS MINOT, *Treasurer.*

Dr. H. I. Bowditch spoke in eloquent terms of eulogy of the late Dr. John Ware.

Scientific Communications.—Dr. John Green, of Boston, read a short paper upon the "use of straw as a substitute for splints, in fractures of the leg." Dr. Green illustrated his communication by means of the apparatus advocated.

At 12 o'clock, M., the Annual Discourse was pronounced by Dr. J. Mason Warren, of Boston, on "Recent Progress in Surgery."

At the conclusion of the Discourse, on motion of Dr. Perkins, of Newburyport, the thanks of the Society were unanimously tendered to Dr. Warren for his able and instructive address.

At 1¼ o'clock, P.M., the Society adjourned, to meet at the Revere House at 2 o'clock. At that hour a spirited and eloquent address was delivered before the reassembled members, and a number of invited guests, by Dr. Henry J. Bigelow, the Anniversary Chairman. After music by the Germania Band, Dr. Bigelow introduced his Excellency, Governor Andrew, who made a few appropriate remarks.

A handsome collation was then partaken of with much zest; after which, Dr. O. W. Holmes, in response to a call from the Anniversary Chairman, read a poem commemorative of the late Dr. John Ware, and of Dr. Robert Ware, his son.

WM. W. MORLAND,
Recording Secretary.

DR. **Francis Minot, Treasurer, in Account with Massachusetts Medical Society.** CR.

Received at Annual Meeting,			$139.00
Sundry Assessments,			584.00
From DISTRICTS.	Barnstable,	$30.00	
	Bristol,	41.00	
	Bristol South,	48.00	
	Essex North,	26.00	
	Franklin,	66.00	
	Hampden,	39.00	
	Middlesex North,	117.00	
	Middlesex South,	102.00	
	Middlesex East,	36.00	
	Plymouth,	63.00	
	Suffolk,	360 00	
	Worcester North,	39.00	
			967.00
Interest — Permanent Fund,		618.92	
	Shattuck Legacy,	504.18	
	Phillips Legacy,	516.67	
			1,639.77
Rents and Taxes,			569.52
Notes payable — J. Homans,		10,000.00	
	A. A. Gould,	767.40	
			10,767.40
Recording Secretary, Diplomas, &c.			5.69
Incidentals,			1.31
			$14,673.69

Balance due Treasurer from last Account,			$767.40
Refunded to DISTRICTS.	Barnstable,	$11.25	
	Bristol South,	18.15	
	Essex South,	9.75	
	Franklin,	21.30	
	Hampden,	11.90	
	Middlesex North,	38.10	
	Middlesex South,	46.35	
	Middlesex East,	10.80	
	Plymouth,	30.15	
	Suffolk,	163.50	
	Worcester North,	29.25	
			390.50
Publications,			1,550.46
Rent, Taxes, Care of Room, Gas and Water,			663.66
Investments — U. S. Bonds,		10,000	
	Savings Bank,	269	
			10,269.00
Interest,			103.00
Treasurer's Salary,			300.00
Collecting,			26.15
Incidentals,			22.60
Paid A. A. Gould, balance due him,			39.60
Sidney Bartlett, for legal services,			100.00
			14,232.37
Balance on hand,			441.32
			$14,673.69

Boston, May 20, 1864. [E. E.]

FRANCIS MINOT, Treasurer.

BOSTON, MAY 23, 1864.

The subscribers have this day examined the accounts of FRANCIS MINOT, M.D., Treasurer of the Massachusetts Medical Society for the past year, and find said accounts to be correctly cast and properly vouched.

SILAS DURKEE, P. M. CRANE, } *Auditors of said Society.*

Officers of the Massachusetts Medical Society.

1864—65.

Chosen May 25th, 1864.

AUGUSTUS A. GOULD,	Boston,	President.
HENRY L. SABIN,	Williamstown,	Vice-President.
WILLIAM E. COALE,	Boston,	Cor. Secretary.
CHARLES D. HOMANS,	Boston,	Rec. Secretary.
JAMES C. WHITE,	Boston,	Librarian.
FRANCIS MINOT,	Boston,	Treasurer.

Vice-Presidents (Ex-Officiis.)

[Arranged according to Seniority.]

Paul L. Nichols.	Erasmus D. Miller.
Thomas R. Boutelle.	Joseph Sargent.
Augustus Torrey.	Cyrus Bell.
John C. Bartlett.	Enoch Cross.
Theodore Kittredge.	Lucius S. Adams.
J. Mason Warren.	William M. Trow.
Alonzo Chapin.	Chauncy M. Hulbert.
George B. Atwood.	Nathaniel G. Trow.

Joseph Murphy.

Councillors.

Barnstable.—Drs. Elijah W. Carpenter, Chatham; S. H. Gould, Brewster; John M. Smith, Barnstable; George W. Doane, Hyannis.

Berkshire.—Drs. Henry H. Childs, Pittsfield; Clarkson T. Collins, Great Barrington; J. Leland Miller, Pittsfield; Henry L. Sabin, Williamstown.

Bristol North.—Drs. William G. Allen, Mansfield; J. B. Bronson, Attleboro'; Charles Howe, Taunton; Thaddeus Phelps, Attleboro'.

Bristol South.—Drs. Lyman Bartlett, New Bedford; W. W. Comstock, Middleboro'; Foster Hooper, Fall River; A. Mackie and C. D. Stickney, New Bedford.

Essex North.—Drs. John Crowell, Jr., Haverhill; Francis A. Howe, Newburyport; William D. Lamb, Lawrence; Oliver S. Lovejoy, Haverhill; Martin Root, Byfield.

Essex South.—Drs. Benjamin Cox, Jr., Salem; Benjamin Haskell, Rockport; Ebenezer Hunt, Danvers; James M. Nye, Lynn; Edward B. Peirson, Salem; Augustus Torrey, Beverly.

Franklin.—Drs. Edward Barton, Orange; C. M. Duncan, Shelburne; C. Temple, Heath.

Hampden.—Drs. Nathan Adams, Springfield; T. L. Chapman, Longmeadow; Alvan Smith, Monson; John Witter, Brimfield.

Hampshire.—Drs. Edward B. Barrett, Northampton; Francis C. Green and Joseph W. Winslow, Easthampton.

Middlesex North.—Drs. John C. Bartlett, North Chelmsford; Elisha Huntington, Lowell; Austin Marsh, Carlisle; Edw. A. Perkins, Tyngsboro'; Charles A. Savory, Lowell.

Middlesex East.—Drs. A. Chapin, Winchester; Ephraim Cutter, Woburn; Joseph D. Mansfield, South Reading; Horace P. Wakefield, Reading.

MIDDLESEX SOUTH.—Drs. C. H. Allen, Cambridgeport; A. B. Bancroft, Charlestown; Henry Cowles, Saxonville; Howland Holmes, Lexington; Enos Hoyt, Framingham; Anson Hooker, East Cambridge; A. C. Livermore, Stow; Augustus Mason, Brighton; D. B. Morse, Watertown; J. B. Taylor, East Cambridge; R. S. Warren, Waltham.

NORFOLK.—Drs. Benjamin E. Cotting, Roxbury; Benjamin Cushing, Dorchester; Joseph G. S. Hitchcock, Foxboro'; Christopher C. Holmes, Milton; Edward Jarvis, Dorchester; Benjamin Mann, Roxbury; A. Le B. Munroe, Medway; Josiah Noyes, Needham; Ebenezer Stone, Walpole.

PLYMOUTH.—Drs. Josiah S. Hammond, Plympton; Asa Millett, Bridgewater; Nelson B. Tanner, Abington; James Wilde, Duxbury.

SUFFOLK.—Drs. S. L. Abbot, J. Ayer, J. Bigelow, H. J. Bigelow, H. I. Bowditch, B. Brown, S. Cabot, E. H. Clarke, H. G. Clark, W. E. COALE, *Corresponding Secretary*, Boston; P. M. Crane, East Boston; W. J. Dale, H. Dyer, J. Flint, Boston; J. B. Forsyth, Chelsea; A. A. GOULD, *President*, A. B. Hall, G. Hayward, J. Homans, J. B. S. Jackson, J. Jeffries, J. S. Jones, F. MINOT, *Treasurer*, W. W. Morland, S. Morrill, E. Palmer, G. C. Shattuck, D. H. Storer, C. E. Ware, J. M. Warren, J. W. Warren, A. A. Watson, Boston.

WORCESTER.—Drs. Nelson Carpenter, Warren; C. P. Fiske, Fiskedale; Henry A. Jewett, Milford; Francis Leland, Northboro'; Ephraim Lovell, West Boylston; Joseph Sargent, Worcester; M. D. Southwick, Blackstone; Edward M. Wheeler, Spencer.

WORCESTER NORTH.—Drs. Thomas R. Boutelle, Fitchburg; C. C. Field, Leominster; Alfred Hitchcock, Fitchburg; Jas. O. Parker, Shirley.

Censors.

LE.—Drs. Elisha W. Carpenter, Chatham; Sam'l Brewster; Jonathan Leonard, Sandwich; G. N. est Harwich; Thomas N. Stone, Wellfleet.

RKSHIRE.—Drs. Frank A. Cady, Pittsfield; C. C. Hol- D. Lee; H. M. Holmes, South Adams; Andrew M. Villiamstown.

STOL NORTH.—Drs. John R. Bronson, Attleboro'; John ace, Henry B. Hubbard, Taunton.

-Drs. Edward P. Abbé, William A. Gordon, er, John H. Mackie, New Bedford; Perez tt, V ham.

NORTH.—Drs. David Dana, Lawrence; Kendall Flint, ill; Walter H. Kimball, Andover; Henry C. Perkins, yport; Jeremiah Spofford, Groveland.

ESSEX SOUTH.—Drs. James M. Nye, Lynn; George A. Perkins, H. Osgood Stone, Salem.

FRANKLIN.—A. C. Deane, Greenfield; E. A. Deane, Montague; C. L. Knowlton, Ashfield.

HAMPDEN.—Drs. William G. Breck, William B. Miller, Henry R. Vaille, Springfield; P. L. B. Stickney, Chicopee; John Witter, Brimfield.

HAMPSHIRE.—Drs. Franklin Bonney, Hadley; Samuel A. Fisk, Northampton; Benjamin F. Smith, Amherst.

MIDDLESEX NORTH.—Drs. Jonathan Brown, Tewksbury; Levi Howard, Chelmsford; Elisha Huntington, Charles A. Savory, Jeremiah P. Jewett, Lowell.

MIDDLESEX EAST.—Drs. Ephraim Cutter, *ex officio*, John M. Harlow, Woburn; Horace P. Wakefield, Reading.

MIDDLESEX SOUTH.—Drs. Alfred Hosmer, Watertown; Harlin H. Pillsbury, Medford; Morrill Wyman, Cambridge.

NORFOLK.—Drs. Ebenezer P. Burgess, Dedham; William C. B. Fifield, Dorchester; D. Wayland Jones, Medfield; Joel Seaverns, Jamaica Plain; Charles C. Tower, South Weymouth.

PLYMOUTH.—Drs. Josiah S. Hammond, Plympton; Benjamin Hubbard, Plymouth; James F. Richards, North Bridgewater.

SUFFOLK.—Drs. J. N. Borland, R. M. Hodges, C. D. Homans, F. E. Oliver, Henry W. Williams, Boston.

WORCESTER.—Drs. Henry Clarke, Thomas H. Gage, Rufus Woodward, Worcester; Benjamin H. Tripp, Rutland; C. A. Wilcox, Uxbridge.

WORCESTER NORTH.—Drs. George Jewett, Alfred Miller, Fitchburg; Asahel A. Plympton, Shirley Village; Clinton Warner, Westminster.

Commissioners of Trials.

BARNSTABLE	George W. Doane	Hyannis.
BERKSHIRE	Henry Pratt	Lanesborough.
BRISTOL NORTH	————	————
BRISTOL SOUTH	William A. Gordon	New Bedford.
ESSEX NORTH	Jeremiah Spofford	Groveland.
ESSEX SOUTH	George Choate	Salem.
FRANKLIN	Humphrey Gould	Rowe.
HAMPDEN	Nathan Adams	Springfield.
HAMPSHIRE	Daniel Thompson	Northampton.
MIDDLESEX NORTH	John O. Green	Lowell.

Middlesex East	Alonzo Chapin	Winchester.
Middlesex South	Wm. W. Wellington	Cambridge.
Norfolk	Ebenezer Alden	Randolph.
Plymouth	Timothy Gordon	Plymouth.
Suffolk	Silas Durkee	Boston.
Worcester	William Workman	Worcester.
Worcester North	James O. Parker	Shirley.

Officers of the District Medical Societies.

Barnstable.—Dr. Chauncy M. Hulbert, South Dennis, *President;* Dr. John L. Lothrop, Provincetown, *Vice-President;* Dr. Nathan Barrows, Sandwich, *Secretary;* Dr. Elijah W. Carpenter, Chatham, *Treasurer.*

Berkshire.—Dr. Lucius S. Adams, Stockbridge, *President;* Dr. Oliver E. Brewster, Pittsfield, *Vice-President;* Dr. Wm. Warren Greene, Pittsfield, *Secretary;* Dr. Abner M. Smith, Pittsfield, *Treasurer.*

Bristol North.—Dr. Joseph Murphy, Taunton, *President;* Dr. Henry B. Hubbard, Taunton, *Vice-President;* Dr. Nomus Paige, Taunton, *Secretary and Treasurer;* Dr. Ira Sampson, Taunton, *Librarian.*

Bristol South.—Dr. George Atwood, Fairhaven, *President;* Dr. F. D. Bartlett, South Dartmouth, *Vice-President;* Dr. Frederick H. Hooper, New Bedford, *Secretary, Treasurer and Librarian.*

Essex North.—Dr. Enoch Cross, Newburyport, *President;* Dr. George W. Garland, Lawrence, *Vice-President;* Dr. Martin Root, Byfield, *Secretary and Treasurer;* Dr. Kendall Flint, Haverhill, *Librarian.*

ESSEX SOUTH. Dr. Augustus Torrey, Beverly, *President;* Dr. Benjamin Cox, Jr., Salem, *Vice-President;* Dr. David Choate, Salem, *Secretary;* Dr. William Mack, Salem, *Treasurer;* Dr. William Neilson, Salem, *Librarian.*

FRANKLIN.—Dr. N. G. Trow, Sunderland, *President;* Dr. Stephen Bates, Charlemont, *Vice-President;* Dr. William Dwight, Bernardston, *Secretary, Treasurer and Librarian.*

HAMPDEN.—Dr. Cyrus Bell, Feeding Hills, *President;* Dr. Alfred Lambert, Springfield, *Vice-President;* Dr. Horatio G. Stickney, Springfield, *Secretary, Treasurer and Librarian.*

HAMPSHIRE.—Dr. William M. Trow, Haydenville, *President;* Dr. Austin W. Thompson, Northampton, *Vice-President;* Dr. Edward B. Barrett, Northampton, *Secretary;* Dr. James Dunlap, Northampton, *Treasurer.*

MIDDLESEX NORTH.—Dr. John C. Bartlett, Chelmsford, *President;* Dr. Jonathan Brown, Tewksbury, *Vice-President;* Dr. George H. Whitmore, Lowell, *Secretary;* Dr. Nathaniel B. Edwards, North Chelmsford, *Treasurer;* Dr. Jeremiah P. Jewett, Lowell, *Librarian.*

MIDDLESEX EAST.—Dr. Alonzo Chapin, Winchester, *President;* Dr. S. Watson Drew, Woburn, *Vice-President;* Dr. Ephraim Cutter, Woburn, *Secretary;* Dr. Horace P. Wakefield, Reading, *Treasurer and Librarian.*

MIDDLESEX SOUTH.—Dr. Theodore Kittredge, Waltham, *President;* Dr. Enos Hoyt, Framingham, *Vice-President;* Dr. Francis H. Brown, Cambridge, *Secretary;* Dr. F. R. C. Kittredge, Waltham, *Treasurer.*

NORFOLK.—Dr. Erasmus D. Miller, Dorchester, *President;* Dr. Benjamin E. Cotting, Roxbury, *Vice-President;* Dr. Edward Jarvis, Dorchester, *Secretary;* Dr. Ebenezer P. Burgess, Dedham, *Treasurer;* Dr. David S. Fogg, South Dedham, *Librarian.*

PLYMOUTH.—Dr. Paul L. Nichols, Kingston, *President*; Dr. Winslow Warren, Plymouth, *Vice President*; Dr. Henry N. Jones, Kingston, *Secretary and Treasurer*; Dr. Francis Collamore, Pembroke, *Librarian*.

SUFFOLK.—Dr. J. Mason Warren, Boston, *President*; Dr. Francis Minot, Boston, *Vice-President*; Dr. D. W. Cheever, Boston, *Secretary*; Dr. C. D. Homans, Boston, *Treasurer*; Dr. Calvin Ellis, Boston, *Librarian*.

WORCESTER.—Dr. Joseph Sargent, Worcester, *President*; Dr. Moses D. Southwick, Blackstone, *Vice-President*; Dr. Henry C. Prentiss, Worcester, *Secretary and Librarian*; Dr. Thomas H. Gage, Worcester, *Treasurer*.

WORCESTER NORTH.—Dr. Thomas R. Boutelle, Fitchburg, *President and Treasurer*; Dr. David Parker, Gardner, *Vice-President*; Dr. George D. Colony, Fitchburg, *Secretary and Librarian*.

SUPPLEMENT TO THE CATALOGUE.

LIST OF THOSE WHO HAVE BECOME FELLOWS SINCE THE PRINTING OF THE CATALOGUE IN 1854.

☞ Fellows whose *names* are not written IN FULL in the Catalogue, will please send them to the Recording Secretary, CHARLES D. HOMANS, 19 West Street, Boston, forthwith, that they may be inserted in the new edition.

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1855	Abbott, Ezra	Canton			
1862	Abbott, Samuel Warren	Woburn			
1855	Adams, Zabdiel B.	Boston			
1860	Allen, A. N.	Pittsfield			
1864	Allen, Charles Gilbert	Barre			
1859	Allen, Justin	Topsfield			
1863	Allen, William	Mansfield			
1862	Allen, William George	Mansfield			
1860	Ames, Joseph S.	Holden			
1861	Andrews, Robert	Orange			
1862	Andrews, R. Foster	Gardner			
1861	Arnold, George J.	Roxbury			
1858	Aten, Henry F.	Dedham			
1854	Barker, Bowen	S. Hanson			
1860	Barker, John W.	Easthampton			
1864	Barnes, Charles W.	Grafton			
1860	Barnes, Edward F.	Marlborough			
1855	Barnes, John.	Milford			
1856	Barnes, Norman S.	Pittsfield			
1861	Barrett, Edward B.	Northampton			
1858	Barrett, William M.	Fitchburg			
1863	Barrows, Nathan	Sandwich			
1861	Barstow, Noyes	Bernardston			
1855	Bartlett, Ezra	Concord, N. H.			
1861	Bates, Joseph N	Worcester			
1856	Beals, H. H.	Pittsfield			
1858	Bement, John W.	Belchertown			
1857	Bemis, Merrick	Worcester			
1855	Bemis, Nathaniel O.	Hubbardston			
1857	Bennett, A. W.	Uxbridge			
1855	Blake, John E.	Middletown, Ct.			
1861	Blake, John G.	Boston			
1859	Both, Carl	Boston			
1863	Bowles, Stephen Wallace	Boston			
1859	Boynton, Royal B.	Townsend			
1855	*Brackett, Wm. T. S.	Olneyville, R. I.		1863	34
1863	Bradley, William Henry	Lowell			
1860	Breed, B. B.	Lynn			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1858	Brewster, John M., Jr.	Palmer Depot			
1856	Briggs, Charles E.	Boston			
1857	Brink, Edwin	Pittsfield			
1863	Brown, F. D.	Webster			
1864	Brown, Francis F.	Winchester			
1861	Brown, Francis Henry	Cambridge			
1855	Brown, J. Henry	West Newton			
1857	Brown, Orlando	Wrentham			
1862	Brown, Wm. Symington	South Reading			
1860	Bryant, Albert H.	Natick			
1864	Bullard, Alfred R.	Holliston			
1859	Burge, William B.	Taunton			
1855	*Burgess, G. M.	Blackstone		1859	42
1859	Burleigh, William H.	Lawrence			
1861	Burnett, Elisha G.	Webster			
1863	Burnham, Walter	Lowell			
1856	Bushnell, William	Boston			
1861	Buttrick, James T.	New Shoreham, R.I.			
1863	Calkins, Marshall	Springfield			
1858	Campbell, Benjamin F.	East Boston			
1862	Carney, Sidney H.	Boston			
1863	Carpenter, Marcus S.	S. Boston			
1861	Cass, Jonathan	Great Barrington			
1858	Chace, John B.	Taunton			
1858	Chamberlain, Eben N.	Millbury			
1860	Chapin, Horace	Somerville			
1856	Chase, Irah E.	Haverhill			
1858	Chace, Preston M.	Danvers			
1858	Cheever, David W.	Boston			
1855	Clark, Henry	Worcester			
1858	Coggswell, George B.	Easton			
1859	Collamore, George A.	Toledo, O.			
1855	Collins, Clarkson T.	Great Barrington			
1855	Cook, McLaurin F.	Boston			
1856	Coolidge, James	Athol Depot			
1862	Corey, Charles G.	Royalston			
1857	Cowdray, Harris	Acton			
1856	Cowles, H.	Saxonville			
1859	Crehore, Charles F.	Boston			
1864	*Crosby, Dixi*	Hanover, N. H.			
1856	Crowell, John, Jr.	Haverhill			
1857	Crozier, Arthur T.	Maysville, Ark.			
1861	Curtis, Hall	Boston			
1862	Cushing, Joseph Whitney	Boston			
1856	Cutter, Ephraim	Woburn			
1862	Damon, Howard Franklin	Boston			
1862	*Davis, Charles E.	Ashby.		1864	42
1864	Davis, Orvis O.	N. Andover			
1860	Dean, John	Boston			
1861	Deane, Ebenezer A.	Montague			
1862	Dearing, Thomas Haven	S. Scituate			
1859	Delano, Marcus F.	Sterling			
1863	Denny, John Henry	Somerville			
1862	Derby, Hasket.	Boston			
1862	Dewolf, Oscar C.	Pittsfield			
1861	Dole, Francis F.	Methuen			
1860	Dow, John O.	Harvard			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1858	Draper, Joseph	Brattleboro', Vt.			
1857	Drew, David F.	Lynn			
1862	Drummond, Tho. Menzies.	Boston			
1855	*Durgin, Elijah S.	Boston		1861	
1863	Dwight, William	Bernardston			
1862	Dyer, Ezra	Philadelphia, Pa			
1861	Eayrs, Charles G. A.	Lowell			
1863	Eddy, William	New Bedford			
1861	Edes, Robert Thaxter.	Dorchester			
1863	Emerson, James	Ashby			
1855	English, R. G. W.	Springfield			
1863	Everett, James B.	Falmouth			
1855	Fabyan, George	Boston			
1861	Fearing, Benjamin, Jr.	Wareham			
1863	Fenn, Artemas Ira	Boston			
1858	Ferguson, Hugh.	South Boston			
1858	Fifield, William C. B.	Harrison Square			
1862	Fisher, Theodore Willis.	South Boston			
1855	Fiske, Daniel S.	East Brookfield			
1855	Flagg, Samuel B.	Boston			
1861	Fletcher, Samuel William.	Pepperell			
1863	Fletcher, W. K.	Fitchburg			
1863	Flowers, William Caldwell.	Boston			
1856	Fobes, Joseph B.	Bridgewater			
1856	Forsaith, Francis F.	Weymouth			
1859	Foss, Stephen	Boston			
1857	Foster, James M.	Springfield			
1862	Fox, John L.	U. S. N.			
1860	French, John O.	Hanover			
1864	Frothingham, George E.	N. Becket			
1860	Fuller, Henry H.	Charlestown			
1856	Gage, Daniel Parker	Lowell			
1856	Gage, George F.	Brattleboro', Vt.			
1857	Galloupe, John S.	——, Ct.			
1863	Garceau, Trefle	Charlestown			
1858	Garland, George W.	Lawrence			
1859	Godding, William W.	Fitchburg			
1859	Goodell, Jonathan W.	Greenwich			
1861	Goodwin, Richard J. P.	Boston			
1859	Gould, Joseph F.	South Boston			
1859	Gould, Joshua B.	Templeton			
1861	Gray, Adoniram Judson.	Portsmouth Gr. R. I.			
1861	Gray, William	Tewksbury			
1858	Green, John	Boston			
1856	Green, Samuel A.	Boston			
1864	Greene, James Sumner.	Milton			
1864	Greene, Nathaniel, Jr.	Boston			
1863	Greene, W. W.	Pittsfield			
1858	Griggs, Samuel.	Westboro'.			
1858	Griggs, Thomas T.	Grafton			
1864	Grosvenor, John Milton.	Woburn			
1863	*Gunn, Neil K.	U. S. A.			
1859	Ham, Abner	Boston		1863	
1863	Hammond, L. H.	Oakham			
1864	Hanks, H. T	Royalston			
1861	Harlow, John Martin	Woburn			
1863	Hart, John	Boston			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1859	Hartley, James W.	Fall River.			
1861	Hartnett, Maurice K.	Boston.			
1860	*Harwood, Henry J.	Lowell.		1863	
1861	*Haskell, Charles H.	S. Abington.		1863	31
1856	Hatch, Horace.	Brookline.			
1855	*Haven, Samuel F., Jr.	Worcester.		1682	32
1859	Hay, Gustavus.	Boston.			
1858	Hayward, John McLean.	Boston.			
1857	Hayward, Nathan, Jr.	Roxbury.			
1858	Head, George E.	Amherst.			
1859	Heard, J. Theodore.	Boston.			
1855	Henderson, Jophanus.	Somerville.			
1862	Herrick, G. H. W.	Charlestown.			
1856	Hill, Edward L.	Williamsburg.			
1858	Hill, Gardner C.	Warwick.			
1856	*Hill, James S.	Sacramento, Cal.		1857	32
1864	Hitchcock, Thomas B.	Boston.			
1862	Holbrook, Silas P.	E. Douglass.			
1855	Holcomb, Clifford C.	Lee.			
1856	Holman, Silas A.	Taunton.			
1859	Holmes, A. R.	New Bedford.			
1858	Holmes, H. M.	South Adams.			
1863	Homans, John, Jr.	U. S. A.			
1855	Hooker, Anson P.	E. Cambridge.			
1859	Hooper, Frederick H.	New Bedford.			
1860	Hoskins, Thomas H.	Boston.			
1856	Hosmer, Alfred.	Watertown.			
1856	How, James C.	Haverhill.			
1857	Howe, George M.	Framingham.			
1862	Hoyt, Dixi Crosby.	Milford.			
1861	Hubbard, Henry B.	Taunton.			
1860	Hubon, Peter E.	Worcester.			
1859	Hurd, Samuel H.	Charlestown.			
1856	Hurd, Yorick G.	Amesbury.			
1863	Hurley, John F.	Boston.			
1858	Hutchins, John W.	S. Framingham.			
1856	Hyde, George S.	Boston.			
1863	Ingalls, Paschal P.	South Boston.			
1863	Ireland, Edward Dillon.	Lowell.			
1863	Jameson, Robert E.	Woburn.			
1857	Janes, Henry.	Waterbury, Vt.			
1858	Jeffries, B. Joy.	Boston.			
1854	Jenks, Thomas L.	Boston.			
1856	Jewett, Charles C.	Holliston.			
1861	Jewett, Fayette.	———.			
1863	Jones, Maurice C.	Chelsea.			
1856	Jones, D. Wayland.	Medfield.			
1859	Jordan, Charles.	South Reading.			
1855	*Keep, Samuel H.	Boston.		1863	30
1863	Kemble, Arthur.	Salem.			
1861	Kemp, Alba Enoch.	N. Prescott.			
1855	*Kendall, Albert A.	Newton L. Falls.		1862	34
1860	Kidder, Moses W.	Lowell.			
1861	Kittredge, F. R. C.	Waltham.			
1855	*Knight, Ebenezer.	Brimfield.		1857	68
1856	Kob, Charles F.	Kansas.			
1856	Lamson, John A.	Boston.			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1857	*Lane, William N.	Charlestown		1862	42
1856	Leach, William	Holmes's Hole			
1861	Lewis, F. B. A.	Watertown, N. Y.			
1855	Lincoln, Francis M.	Boston			
1859	Lincoln, George C.	Natick			
1859	Livermore, Abel C.	Stow			
1863	Livingston, Alfred	Lowell			
1861	Lord, Friend Drake	Sterling			
1856	Lovejoy, Oliver S.	Haverhill			
1856	*Lynch, Thomas	South Boston		1857	25
1855	Lynde, James P.	Athol			
1858	Lyons, Charles T.	Coleraine			
1863	Mack, David, Jr	U. S. N.			
1864	Mackie, Wm. Basilio	Boston			
1862	Manley, Edwin	N. Easton			
1859	Mansfield, John R.	New York			
1859	*Manning, J. H.	Pittsfield		1863	
1863	Marcy, Henry Orlando	Cambridge			
1859	Marrisul, Felix V.	Fall River			
1858	Marsh, Lebbeus Eaton	Granby			
1863	Martin, Saxton P.	New Braintree			
1855	Mason, William	Charlestown			
1856	McCollister, John Q. A.	South Groton			
1863	McGregor, Murdock	Boston			
1864	McLaughlin, Jas. Augustin.	Boston			
1855	McLean, A. S.	Springfield			
1864	McSheehy, John J.	U. S. A.			
1861	Meacham, Franklin	W. Stockbridge			
1861	Mead, M. S.	Northfield			
1859	Melcher, Samuel H.	Potosi, Mo.			
1863	Merriam, Joseph Waite	U. S. N.			
1859	*Mignault, Deodat	Lowell		1862	29
1860	Mills, C. D.	Pittsfield			
1855	Miner, D. W.	Ware.			
1861	Mitchell, H. Hedge	Bridgewater			
1861	Moffatt, George T.	Boston			
1864	Montville, Alfred	Hatfield			
1861	Moore, James M.	South Groton			
1854	Morong, Edward P.	Cahawba, Ala.			
1854	Morris, William B.	Charlestown			
1854	Morse, James R.	N Cambridge			
1863	Munn, Curtis Emerson	Westfield			
1860	Munsell, G. N.	West Harwich			
1859	Murphy, Joseph	Taunton			
1856	Neilson, William	Salem			
1863	Nelson, Abiel W	Middleboro'			
1860	Nichols, George H.	Boston			
1856	Nichols, George K.	Sandisfield			
1859	Nichols, John T. G.	Cambridge			
1855	Nichols, Jonathan	Harvard			
1857	Nihill, John L	South Boston			
1857	Niles, John N	Boston			
1861	O'Connell, Patrick A.	Boston			
1855	Oliver, Henry K.	Boston			
1858	Orcutt, Almon M.	Hardwick.			
1862	Ordway, John Pond.	Boston			
1856	Osgood, William	Boston			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1855	Otis, George A.	Springfield			
1863	Owen, Varillus Linus.	Springfield			
1855	Page, Calvin G.	Boston			
1864	Paige, Nomus.	Taunton			
1864	Parker, Edgar.	Saxonville			
1861	*Parker, Peter.*	Washington, D. C.			
1856	Partridge, Louis E.	Natick.			
1861	Pattee, Asa F.	W. Amesbury			
1861	Pease, Loren H.	Thompsonville, Ct.			
1856	*Perkins, D. C.	S. Danvers.		1863	39
1863	Perkins, George Thomas.	Roxbury.			
1855	*Perkins, John P.	Great Barrington.		1856	
1860	Person, John W.	Lowell.			
1859	Pierce, George W.	Leominster			
1858	Pike, Horace G.	Boston.			
1859	Pillsbury, Harlin H.	Medford			
1861	Pillsbury, John M.	Lawrence			
1863	Pinkham, George Edwin	Lowell.			
1859	Pinkerton, Thomas H.	Virginia City, U. T.			
1861	Plympton, Asahel A.	Shirley			
1861	*Plympton, H. S.	Cambridge		1863	25
1857	Potter, Albert.	Burrillville, R. I.			
1858	Potter, Royal N.	Deerfield			
1859	Pouliot, Francis E. W.	Quebec, C. E.			
1861	Pratt, Henry.	Lanesboro'			
1858	Prentiss, Henry Conant.	Worcester.			
1861	Prince, J. P.	Lynn.			
1860	Prius, Peter.	Lowell.			
1859	Proctor, William B.	New Sharon, Me.			
1860	Provan, Robert.	South Boston			
1863	Quimby, Elisha Hervey.	Salem			
1857	Ranney, Mark.	Somerville			
1863	Ransom, N. M.	W. Stockbridge.			
1863	Reynolds, Joseph Brown.	Concord			
1864	Rice, Frank H.	Worcester			
1855	Rice, I. Marcus.	Worcester			
1861	Rice, William E.	South Boston			
1861	Richards, James F.	Campello			
1855	Richardson, Horace.	Boston.			
1856	Richardson, John H.	Chesterfield			
1861	Ricketson, Arthur.	New Bedford			
1863	*Robbins, Eugene Patterson.	Boston.	1863		
1863	Roberts, Michael	Lawrence			
1858	Robinson, Albert B.	Holden			
1859	Robinson, J. Henry.	Southboro'			
1859	Robinson, John L.	Wenham.			
1860	*Robinson, Marcus Tullius.	Jamaica Plain.		1864	51
1862	Robinson, Thad. Pulaski.	Newton Centre			
1858	Rockwood, Henry.	Westford.			
1861	*Roeser, Bernhard.*	Athens, Greece.			
1855	Rogers, Seth.	Worcester.			
1864	Rood, James T.	Brookfield			
1858	Root, E. B.	Ohio			
1862	Roy, Joseph	Boston.			
1856	Rublee, Chauncy M.	Montpelier, Vt.			
1858	Ruppaner, Antoine	Boston.			
1860	Ryan, John	Charlestown.			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1858	Sargent, George W.	Lawrence			
1857	Sargent, Lucius M., Jr.	Boston			
1859	Saville, Henry M.	Boston			
1859	Sawyer, Edward J.	Gardner			
1856	Sawyer, Frederick A.	Wareham			
1860	Sawyer, John W.	Madison, Wis.			
1853	Sawyer, Jeremiah H.	Newburyport.			
1861	Seyffarth, Edmund	Portsmouth Gr., R.I.			
1863	Shattuck, George Francis	Pepperell.			
1863	Shattuck, J. Chamberlain	Pepperell			
1860	Shaw, Henry Lyman	Boston			
1860	Sheldon, L. R.	Boston			
1861	Shipley, George T.	Boston			
1856	Simmons, Gustavus L.	Sacramento, Cal.			
1858	Sinclair, Alexander D.	Boston			
1863	Skinner, Edward M.	Boston			
1854	Smith, Abner M.	Pittsfield			
1856	Smith, Andrew M.	Williamstown			
1855	•Smith, Albert D.	Holden		1858	36
1856	Smith, G. O.	Haverhill			
1858	Smith, Jerome C.	New York			
1859	Smyth, James.	Boston			
1863	Snow, Jesse W.	Danvers			
1856	Soule, Horatio S.	Winthrop			
1863	Spofford, Morris	Groveland			
1860	Sprague, Francis P.	Boston			
1857	Spring, Charles H.	Boston			
1856	Spring, John.	Dublin, Ireland			
1860	Stearns, Henry P.	Hartford, Ct.			
1860	Stearns, John, Jr.	Boston			
1855	Stedman, Charles E.	Dorchester			
1864	Stedman, Joseph	Jamaica Plain			
1856	•Stetson, A. Everett	Dorchester		1857	32
1859	Stevens, Francis J.	Haverhill			
1864	Stickney, Horatio G.	Springfield			
1861	Stiles, R. Cresson.	Pittsfield.			
1861	Stone, Silas E.	Walpole			
1863	Stone, Thomas N.	Wellfleet			
1862	Street, Charles Carroll	Boston			
1858	Strickland, Rial	Enfield, Ct.			
1857	Stuart, Absalom B.	West Hampton			
1862	Sturtevant, Charles	New Bedford			
1863	Swasey, Oscar F.	Beverly.			
1863	Tanner, Nelson B., Jr.	N. Abington			
1858	Taylor, John D.	Boston			
1858	Temple, Cyrus	Heath			
1857	Temple, Theron	Ashburnham			
1857	Thompson, Austin W.	Northampton.			
1861	Thompson, George F.	Belchertown.			
1858	Thorndike, William.	Beverly.			
1857	Tinker, Martin A.	Burnt Hills, N. Y.			
1857	Tjader, Antoun W.	Boston			
1861	Topliff, Charles C.	Lunenburg.			
1863	Tourtelot, Aug. Valentine	Boston			
1861	Tower, Charles C.	S. Weymouth.			
1859	Towle, Samuel K.	Haverhill			
1857	Tracy, Stephen	Andover			
1864	Treadwell, Joshua Brackett.	Boston			

Admitted.	Name.	Residence.	Retired.	Died.	Age.
1863	Tripp, B. H.	Rutland			
1855	Trow, Nathaniel G	Sunderland			
1855	Tucker, George G.	Westfield			
1859	Tuttle, Charles M.	Littleton, N. H.			
1859	Tyler, John E.	Somerville			
1855	Tyler, Warren	N. Brookfield			
1858	Underwood, George L.	New York			
1861	*Velerj Gaetano*	Rome, Italy			
1855	Wakefield, Adoniram J.	Hopkinton			
1856	Wakefield, Jonas F.	South Malden			
1863	Walcott, Henry Pickering	Cambridge			
1855	Walker, Clement A.	South Boston			
1864	Walker, James Edwin.	Boston			
1855	Walsh, John D.	Boston			
1858	Walsh, Peter D.	Boston			
1859	Walsh, Walter M.	Boston			
1863	Ward, George A.	Holyoke			
1863	Ward, George Whitfield	Upton			
1862	Ward, Edwin Fletcher	Enfield			
1863	Ward, Saxton P.	New Braintree			
1856	*Ware, Robert	Boston		1863	29
1863	Warner, Emerson	Shrewsbury			
1863	Warner, Homer Howard	Springfield			
1860	Warren, Charles	Charlestown			
1863	Warren, Dewey Kellogg	Boston			
1861	Warren, Oren	W. Newbury			
1859	Webster, Joseph R.	Milton			
1856	Weeks, Charles M	Boston			
1856	*Wellman, James R.	Fitchburg		1862	32
1858	Wells, Noah	Greenfield			
1855	*Wheatland, Richard H.	Salem		1863	33
1863	Wheeler, Charles Augustus	W. Boylston			
1856	White, James C.	Boston			
1860	White, Samuel	Springfield			
1860	White, Whitman B.	Curtisville			
1855	Whiting, I. B.	Janesville, Wis.			
1856	Whittemore, Henry H. F.	Marblehead			
1863	Wilder, Burt G.	Newtonville			
1861	Willard, Josiah N.	Boston			
1861	Williams, A. A. C.	Pittsfield			
1864	Willis, John Warren	Waltham			
1861	Willis, Lemuel Murray	Marblehead			
1864	Wilson, Benjamin F.	New Bedford			
1858	Windship, George B.	Boston			
1863	Winslow, Joseph W.	East Hampton			
1855	Winsor, Frederic	Boston			
1860	Witter, John	Brimfield			
1863	Wood, Alexander M.	Boston			
1856	Wood, Franklin A.	Petersham			
1855	Wood, James A.	New York			
1860	*Wood, James R.*	New York			
1855	Woodbury, Elwell	Medford			
1855	Woodward, Rufus	Worcester			
1861	Wright, Eliphalet	Lee			
1855	Yale, John.	Ware.			

Gentlemen will please notify the Recording Secretary of any errors, omissions or removals.

DIPLOMAS can be obtained by application to the Recording Secretary, enclosing the sum of One Dollar. (See By-Law No. IV.)

PROCEEDINGS OF THE COUNCILLORS.

October Meeting, 1864.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held at the room in Temple Place, Boston, on Wednesday, October 5th, 1864, at 11 o'clock, A.M.

The President, Dr. A. A. Gould, in the Chair.

The following Councillors were present: —

Bristol South.
Foster Hooper.

Essex North.
J. Crowell, Jr.
F. A. Howe,
W. D. Lamb,
M. Root.

Essex South.
J. M. Nye,
Aug. Torrey.

Middlesex North.
C. A. Savory.

Middlesex East.
A. Chapin,
E. Cutter,
H. P. Wakefield.

Middlesex South.
H. Cowles,
E. Hoyt,
A. Hooker,
A. Mason,
L. B. Morse,
J. B. Taylor.

Norfolk.
B. E. Cotting,
J. G. S. Hitchcock.

Plymouth.
A. Millett,
J. Wilde.

Suffolk.
J. Ayer,
H. J. Bigelow,
B. Brown,
W. E. Coale,
P. M. Crane,
H. Dyer,
A. A. Gould,
A. B. Hall,
J. Homans,
J. B. S. Jackson,
J. Jeffries,
J. S. Jones,
F. Minot,
W. W. Morland,
E. Palmer,
G. C. Shattuck,
D. H. Storer,
J. M. Warren,
J. W. Warren,
A. A. Watson.

Worcester.
C. P. Fiske.

Worcester North.
C. C. Field.

The Secretary read the record of the Annual Meeting of the Councillors, and it was accepted.

Dr. J. Homans, of Boston, Chairman of a Committee appointed at the last meeting to consider the expediency of altering the By-Laws relating to Censors, made a report, recommending an amendment, which was adopted by the Council, and referred to the Society at large, at its Annual Meeting.

Dr. J. Homans, of Boston, from the Committee appointed at the last meeting to consider the subject of occupying two days for the session of the Society at its Annual Meeting, submitted a report recommending that this proposition should be carried into effect. The report was accepted, and after some discussion, was referred again to the same Committee, with the addition, by request of the original members, of Drs. J. M. Warren, G. C. Shattuck and D. H. Storer, of Boston.

Dr. J. Ayer, of Boston, from the Committee on Membership and Resignations, reported that the following Fellows have made application to be placed on the retired list:

Dr. Francis D. Bartlett, . .	S. Dartmouth.
" Henry S. Lee, . . .	Boston.
" Josiah Norcross, . . .	S. Reading.

They recommended that the case of Dr. Bartlett should lie over till the next meeting for further consideration ; that Dr. Lee, having paid ten dollars, be excused from the rest of his dues, and be placed on the list of Retired Members ; and that Dr. Norcross, having given up practice and paid all his dues, be made a Retired Member.

The report was accepted, and the recommendations adopted.

The President appointed the following gentlemen to constitute the Committee of Arrangements for the next Annual meeting of the Massachusetts Medical Society:

Drs. W. W. Morland, A. W. Hooker, W. E. Townsend, C. D. Homans, J. N. Borland.

Adjourned at 12½ o'clock.

C. D. HOMANS,
Secretary.

FEBRUARY MEETING, 1865.

A Stated Meeting of the Councillors of the Massachusetts Medical Society was held at the Room in Temple Place, Boston, on Wednesday, February 1st, 1865, at 11 o'clock, A.M.

The President, Dr. A. A. GOULD, in the Chair.

The following are the names of the Councillors present:

Essex North.
F. A. Howe,
W. D. Lamb.

Essex South.
J. M. Nye,
Aug. Torrey.

Middlesex East.
A. Chapin,
E. Cutter,
H. P. Wakefield,
J. D. Mansfield.

Middlesex South.
H. Holmes,
E. Hoyt,
A. Hooker,
Aug. Mason,
L. B. Morse,
J. B. Taylor,
R. S. Warren.

Norfolk.
B. E. Cotting,
C. C. Holmes,
E. Jarvis,
A. LeB. Monroe,
E. Stone.

Plymouth.
Asa Millett.

Suffolk.
S. L. Abbot,
J. Ayer,
H. J. Bigelow,
H. I. Bowditch,
B. Brown,
S. Cabot,
H. G. Clark,
W. E. Coale,
P. M. Crane,
H. Dyer,
J. Flint,
J. B. Forsyth,
A. A. Gould,
A. B. Hall,
Geo. Hayward,
J. Homans,
J. Jeffries,
J. S. Jones,
F. Minot,
S. Morrill,
E. Palmer,
G. C. Shattuck,
D. H. Storer,
C. E. Ware.

Worcester.
N. Carpenter,
C. P. Fiske.

Worcester North.
T. R. Boutelle.

The record of the meeting in October, 1864, was read and accepted.

Dr. J. Homans, from the Committee on two days' session at the Annual Meeting of the Society, made a report, which was accepted, and, after some verbal amendments by Dr. Cotting, of Roxbury, its recommendations were adopted.

Dr. J. Ayer, from the Committee on Membership and Resignations, made a report, which was accepted, and its recommendations adopted, as follows:

Dr. Francis D. Bartlett, . . S. Dartmouth;
" Jonas A. Marshall, . . Fitchburg,

having attained the age of sixty years, and complied with the requirements of the By-Laws, were made Retired Members at their own request; and Dr. Henry Bryant, of Boston, was permitted to resign his membership, having retired from practice.

Dr. Millett, of Bridgewater, made some remarks on the manner of moving sick persons from the different cities and towns to the State Almshouses, instancing some cases of great hardship on the route.

On motion of Dr. Wakefield, of Reading, it was voted to appoint a Committee of five to carry the subject before the State Legislature. The President appointed on that Committee, Drs. Wakefield, Bowditch, Millett, Hitchcock and Chapin.

On motion of Dr. Hoyt, of Framingham, it was voted that the Corresponding Secretary be authorized to cause photographs of the print of Jenner to be made for distribution among the members.

Adjourned at 12½ o'clock.

C. D. HOMANS,
Recording Secretary.

Annual Meeting, May 30, 1865.

The Annual Meeting of the Councillors of the Massachusetts Medical Society was held in Boston, at the usual place, on Tuesday Evening, May 30th, 1865.

The President called the meeting to order at about 8 o'clock.

Councillors present:

Berkshire.
C. T. Collins,
J. L. Miller.

Bristol South.
F. Hooper,
J. H. Mackie,
W. E. Sparrow.

Essex North.
Kendall Flint,
Martin Root.

Essex South.
Eben. Hunt,
E. B. Peirson,
A. Torrey.

Middlesex North.
C. A. Savory.

Middlesex East.
A. Chapin,
J. C. Dorr,
J. M. Harlow,
H. P. Wakefield.

Middlesex South.
R. L. Hodgdon,
J. E. Tyler.

Norfolk.
E. M. Burgess,
J. G. S. Hitchcock,
C. C. Holmes,
E. Jarvis,
B. Mann.

Plymouth.
Asa Millett,
N. B. Tanner.

Suffolk.
J. Ayer,
H. J. Bigelow,
J. Bigelow,
B. Brown,
C. E. Buckingham,
S. Cabot,
P. M. Crane,
C. Ellis,
J. B. Forsyth,
A. A. Gould,
A. B. Hall,
Geo. Hayward,
C. D. Homans,
J. Homans,
J. B. S. Jackson,
F. Minot,
W. W. Morland,
G. C. Shattuck,
C. E. Ware,
J. M. Warren,
A. A. Watson,
W. G. Wheeler,
H. W. Williams.

Worcester.
T. H. Gage,
F. Leland,
O. Martin,
A. M. Orcutt.

The Secretary read the names of the Fellows admitted, and of those deceased during the year.

The President announced the death of the Corresponding Secretary, Dr. W. E. Coale.

The Treasurer read his annual report, which was accepted. The report of the Auditing Committee was read by Dr. P. M. Crane, and also accepted.

Dr. Minot, from the Committee on Membership and Resignations, made a report, recommending that the following Fellows be placed on the retired list, having reached the age of sixty, and having paid their dues to the Society:

Dr. Henry Dyer, . . Boston;
" E. E. Denniston, . . Northampton;
" Jacob Mitchell, . . Chelsea;
" Daniel Perley, . . Lynn;
" Alexander Poole, . Chelsea.

It was voted that the next Annual Meeting be held in the City of Boston.

Dr. H. P. Wakefield, of Reading, from the Committee appointed at the last meeting to bring before the Legislature the subject of the admission of sick persons to the State Almshouses, made a report, to the effect that an act had been passed which would probably remedy the evils complained of. The report and act are on file.

On motion of Dr. F. Minot, of Boston, it was voted that a Committee of five Councillors be appointed by the Chair to take into consideration the subject of increasing the rate of the annual assessment, and to report at the next meeting of the Councillors.

The President subsequently appointed Drs. H. P. Wakefield of Reading, Francis Minot and C. E. Ware of Boston, Anson Hooker of East Cambridge, and H. C. Perkins of Newburyport, as this Committee.

Dr. Jarvis, of Dorchester, from the Committee on Nominations, reported the following list of officers, who were elected unanimously by ballot:

Dr. A. A. Gould, Boston, . . *President.*
" H. L. Sabine, Williamstown, . *Vice-President.*
" C. D. Homans, Boston, . . *Cor. Secretary.*
" R. M. Hodges, Boston, . . *Rec. Secretary.*
" J. C. White, Boston, . . *Librarian.*
" F. Minot, Boston, . . *Treasurer.*
" G. C. Shattuck, Boston, . . *Orator.*
" W. E. Townsend, Boston, . *Anniv. Chairman.*

The following Committees were appointed by the Chair:

On Publications.
Drs. G. C. Shattuck, B. E. Cotting, W. W. Morland.

On Finance.
Drs. J. Homans, S. Durkee, P. M. Crane.

On Membership and Resignations.
Drs. J. Ayer, F. Minot, C. Ellis.

Of Arrangements for the next Annual Meeting.
Drs. W. W. Morland, C. D. Homans, J. N. Borland,
R. M. Hodges, A. P. Hooker.

To Audit the Treasurer's Accounts.
Drs. Ezra Palmer, C. E. Ware.

Dr. J. Mason Warren offered the following Resolution on the death of Dr. W. E. Coale, and it was unanimously adopted. He said:

MR. PRESIDENT:

I rise briefly to recall the attention of the Councillors to the loss which our Society has recently sustained by the sudden death of its Corresponding Secretary and Anniversary Chairman.

In acknowledgment of his long and faithful services as an officer of this Society, of his refined literary tastes, and eminently genial nature, I would offer the following Resolution, to be placed on our records.

Resolved, That in the death of our respected colleague, Dr. WILLIAM EDWARD COALE, the Councillors of the Massachusetts Medical Society mourn the loss of one who was always ready to sustain its dignity, and to advocate its rights. Remarkable for the extent and accuracy of his memory, he was alike distinguished for his intimate acquaintance with the literature of the profession, and for his ready ingenuity in applying his knowledge to the varied exigencies of practice. A fluent writer and speaker, he contributed much to the interest and usefulness of our literary and scientific meetings, while his rare social gifts and uniform cheerfulness of disposition enlivened all our festive occasions, and lent a peculiar charm to even the briefest and most casual interview.

On motion of Dr. Chapin, of Winchester, it was voted that the Committee of Arrangements be requested to obtain, if possible, "commutation tickets on the railroads for the members of the Society who shall attend the meeting next year."

Adjourned at 9½ o'clock.

C. D. HOMANS,
Recording Secretary.

PROCEEDINGS OF THE SOCIETY.

ANNUAL MEETING,

May 31, 1865.

The Annual Meeting of the Society was held in the Common Council Chamber of Boston on Wednesday, May 31st, at 10 o'clock, A.M.

The President, Dr. A. A. Gould, in the Chair.

The Secretary read the record of the previous meeting, and laid before the Society the record of the Councillors for the preceding year.

The names of those who have become Fellows since the last Annual Meeting, and of those Fellows who have died during the year, were read by the Secretary.

Fellows admitted since May 25th, 1864.

B. F. D. Adams,	Waltham.
Alexander Anderson,	River John, N. S.
Samuel F. Bachelder,	S. Danvers.
George B. Balch,	Sheffield.
Kirk H. Bancroft,	Lowell.
William Bass,	Lowell.
Lucius F. Billings,	Barre.
Daniel A. Cleaveland,	West Tisbury.
Aaron Cornish,	New Bedford.
John Dole,	S. Reading.
Stephen W. Driver,	Cambridge.
Willard S. Everett,	Fairmount.
Michael F. Gavin,	Boston.
John Homer,	———

Isaiah Hutchins,	West Acton.
Alvin Jenkins,	West Amesbury.
George Whitefield Johnson,	Southboro'.
Samuel Wood Langmaid,	Cambridge.
David T. Lincoln,	Boston.
W. H. Lincoln,	Hubbardston.
Josiah Stickney Lombard,	Boston.
Edward Greeley Loring, Jr.	"
Samuel J. McDougall,	"
John J. McSheehy,	"
Daniel Thurber Nelson,	"
Albert Lane Norris,	"
Charles L. Pierce,	Ashburnham.
Benjamin T. Prescott,	Boston.
Marshall E. Simmons,	Chatham.
David F. Sinclair,	———
John Skinner,	Boston.
F. P. Sprague	"
Charles Walter Swan,	"
J. C. Walker,	"
Joseph Webster,	New Bedford.
Charles Henry White,	Watertown.
Jacob P. Whittemore,	Haverhill.
Edward A. Whiston,	Boston.
Robert Willard,	Boston.
Alfred G. Williams,	Athol.
John Warren Willis,	Waltham.
Edward Weston,	E. Cambridge.

The President stated that there were two subjects referred to the Society by the Councillors, which involved some changes in the By-Laws, and therefore necessitated an adjourned meeting of the Society.

The Secretary announced that the following gentlemen were present as Delegates from other State Societies, viz.:

Drs. Hiram Corliss and A. L. Saunders, of the New York State Medical Society.

Drs. S. H. Pennington and R. M. Cooper, from the New Jersey State Medical Society.

Each of these gentlemen was introduced to the Society by the President, and made a few pleasant remarks.

The following Resolution was adopted, on motion of Dr. H. I. Bowditch, of Boston:

"*Resolved*, That a Committee of one from each District Society be appointed by the President, whose duty it shall be to report at the next Annual Meeting of this Society, upon the prevalence of the disease called 'Cerebro-Spinal Meningitis,' or 'Spotted Fever.'"

The following gentlemen were appointed on this Committee, viz.:

Dr. Luther, Parks, Jr., of Boston, *Chairman*.

Barnstable,	G. W. Doane,	Hyannis.
Berkshire,	N. S. Babbitt,	South Adams.
Bristol North,	Charles Howe,	Taunton.
Bristol South,	F. H. Hooper,	New Bedford.
Dukes & Nantuc.	E. P. Fearing,	Nantucket.
Essex North,	Wm. D. Lamb,	Lawrence.
Essex South,	H. O. Stone,	Salem.
Franklin,	J. W. D. Osgood,	Greenfield.
Hampden,	P. L. B. Stickney,	Chicopee.
Hampshire,	A. W. Thompson,	Northampton.
Middlesex E.	Ephraim Cutter,	Woburn.
Middlesex N.	N. B. Edwards,	N. Chelmsford.
Middlesex S.	Alfred Hosmer,	Watertown.
Norfolk,	C. C. Tower,	S. Weymouth.
Plymouth,	H. N. Jones,	Kingston.
Suffolk,	Luther Parks,	Boston.
Worcester,	Joseph Sargent,	Worcester.
Worcester N.	T. R. Boutelle,	Fitchburg.

At 12 o'clock, on motion of Dr. H. L. Sabin, of Williamstown, it was voted to adjourn for one minute.

ADJOURNED MEETING.

May 31, 1865.

The President called the Society to order at a few minutes past noon, and stated that there were two matters involving changes or additions to the By-Laws, which would properly come before this meeting. The first was a report from the Councillors, recommending a two days' session of

the Society, the first day to be the day preceding the Annual Meeting in Boston; the time to be spent in listening to scientific communications, and visiting different medical and other institutions in the city, with a dinner at 4 o'clock, P.M., and the second day to be the Anniversary of the Society, as at present.

A discussion ensued, from which it appeared that while gentlemen generally were in favor of a two days' session, those from out of the city objected to the day and hour of the dinner.

Dr. David Rice, of Leverett, offered the following Resolution as a substitute for the plan proposed by the Committee:

"*Resolved*, That a meeting preliminary to the Annual Meeting of the Massachusetts Medical Society be held on the Tuesday immediately preceding it, the time to be occupied in such a manner as may be determined upon by a Committee chosen for that purpose."

A division of the Resolution was called for and agreed to. The Society then voted, first, to hold a meeting preliminary to the Annual Meeting, as above; and, second, that a committee be appointed to determine in what way the time shall be occupied.

The President appointed the following gentlemen to serve on this committee: Drs. J. Homans, Alonzo Chapin, J. L. Miller, J. M. Warren, D. H. Storer and G. C. Shattuck.

The President stated that the second matter to come before the meeting was a report of the Committee of the Councillors on the rules regarding Censors, which recommended the following additions to the By-Laws: "No Board of Censors shall admit to membership any individual who is a resident in another district, unless he presents a satisfactory certificate of character and professional standing from the President, or at least two of the Censors of the District wherein he resides."

The question was put, and the recommendation adopted by the Society without discussion.

At one o'clock the Society was again called to order, and listened to the Annual Address, written by Dr. B. E. Cotting, of Roxbury. In the absence of the orator, the address was read by Dr. R. M. Hodges, of Boston.

The thanks of the Society were voted to Dr. Cotting for his able and philosophical Discourse.

Adjourned at 2 o'clock, P.M.

C. D. HOMANS,
Recording Secretary.

TREASURER'S REPORT.

THE Treasurer respectfully reports that the amount of money received by him for the Society, during the past year, was five thousand eight hundred and thirty-one dollars and twenty-four cents ($5,831 24). The amount expended was five thousand three hundred and two dollars and ninety-one cents ($5,302 91), leaving a balance in his hands of five hundred and twenty-eight dollars and thirty-three cents ($528 33). The principal items of receipt and expenditure will be found in the analysis account hereto annexed.

One thousand and ninety dollars ($1,090 00) has been paid towards extinguishing the Society's debt, and in a few weeks we shall owe but one thousand dollars. The surplus income of the Shattuck Fund (after paying for the printing of the "Medical Communications") has been deposited in the Savings Bank.

The great increase in nearly all our expenses, without corresponding augmentation of the annual assessment, the payment of a large instalment of our debt, together with the continued diminution of our income from the absence of many of the Fellows in the army, have reduced the balance in favor of the Society to a smaller amount than might otherwise have been expected.

The property of the Society is as follows :—

Permanent Fund,	$11,253 30
Phillips Fund,	10,000 00
Shattuck Fund,	9,385 87
Cash,	528 33
	$31,167 50

Respectfully submitted.

FRANCIS MINOT, *Treasurer.*

Boston, May 27, 1865.

BOSTON, MAY 29, 1865.

THE undersigned have this day examined the accounts of Francis Minot, Treasurer of the Massachusetts Medical Society, for the past year, and find said accounts to be correctly cast and properly vouched, and there is a balance to the credit of the Society amounting to five hundred and twenty-eight dollars and thirty-three cents. They have also examined the bonds and other evidences of property belonging to the Society, and find that they represent the amount of thirty-one thousand one hundred and sixty-seven dollars and fifty cents.

SILAS DURKEE, } *Auditing*
P. M. CRANE, } *Committee.*

Francis Minot, Treasurer, in Account with Massachusetts Medical Society.

Dr. **Cr.**

Balance from old account,			$441.32
Received at Annual Meeting,			500.00
Sundry Assessments,			108.00
From Districts.	Barnstable,	$45 00	
	Berkshire,	105.00	
	Bristol North,	52.00	
	Bristol South,	63.00	
	Essex North,	154.00	
	Essex South,	108.00	
	Franklin,	63.00	
	Hampden,	39.00	
	Hampshire,	69.00	
	Middlesex North,	72.00	
	Middlesex East,	48 00	
	Norfolk,	99.00	
	Plymouth,	24.00	
	Suffolk,	719.00	
	Worcester,	117.00	
	Worcester North,	18.00	
			1,795.00
Interest — Permanent Fund,		618.92	
Shattuck Fund,		504.18	
Phillips Fund,		999.00	
			2,122.10
Rents and Taxes,			608.01
Withdrawn from Savings Bank,			250.00
Sundries,			6.81
			$5,831.24

Refunded to Districts.	Barnstable,	$17.25	
	Berkshire,	34.50	
	Bristol North,	25.35	
	Bristol South,	24.90	
	Essex North,	66.00	
	Essex South,	55 80	
	Franklin,	18.90	
	Hampden,	9.75	
	Hampshire,	24.30	
	Middlesex North,	29.10	
	Middlesex East,	19.80	
	Norfolk,	40.45	
	Plymouth,	13.20	
	Suffolk,	179.75	
	Worcester,	41.10	
	Worcester North,	15.75	
			615.90
Publications,			1,942.73
Rent, Taxes, Care of Room, Gas and Water,			710.90
Investments,			200.00
Interest,			60.00
Treasurer's Salary,			300.00
Collecting,			11.88
Notes payable, A. A. Gould on account,			650.00
Annual Meeting—Collation,		712.10	
Music,		61.00	
Sundries,		10.00	
			783.10
Sundries,			28.40
Balance of Cash on hand,			528.33
			$5,831.24

Boston, May 27, 1865. [E. E.]

FRANCIS MINOT, Treasurer.

Officers of the Massachusetts Medical Society.

1865—66.

Chosen May 31, 1865.

AUGUSTUS A. GOULD,	Boston,	President.
HENRY L. SABIN,	Williamstown,	Vice-President.
CHARLES D. HOMANS,	Boston,	Cor. Secretary.
——— ———	———	Rec. Secretary.
JAMES C. WHITE,	Boston,	Librarian.
FRANCIS MINOT,	Boston,	Treasurer.

Vice-Presidents (Ex-Officiis.)

[Arranged according to Seniority.]

Paul L. Nichols.	Jonathan Brown.
Thomas R. Boutelle.	Enos Hoyt.
Benjamin Cox, Jr.	Lucius S. Adams.
J. Mason Warren.	John W. Osgood.
Benjamin E. Cotting.	Chauncy M. Hulbert.
Francis D. Bartlett.	William M. Trow.
Joseph Sargent.	George W. Garland.
Cyrus Bell.	Joseph Murphy.

John M. Harlow.

Councillors.

Barnstable.—Drs. Franklin Dodge, Harwich; James B. Everett, Chauncy M. Hulbert, S. Dennis; John M. Smith, Barnstable.

BERKSHIRE.—Drs. Henry H. Childs, Pittsfield; Clarkson T. Collins, Great Barrington; J. Leland Miller, Pittsfield; Henry L. Sabin, Williamstown.

BRISTOL NORTH.—Drs. William G. Allen, Mansfield; J. B. Bronson, Thaddeus Phelps, Attleboro'.

BRISTOL SOUTH.—Drs. William A. Gordon, New Bedford; Foster Hooper, Fall River; Andrew Mackie, John H. Mackie, New Bedford; William E. Sparrow, Mattapoisett.

ESSEX NORTH.—Drs. Enoch Cross, Newburyport; David Dana, Lawrence; Kendall Flint, Haverhill; Yorick G. Hurd, Amesbury; Martin Root, Byfield.

ESSEX SOUTH.—Drs. David Choate, Benjamin Cox, Jr., Salem; Benjamin Haskell, Rockport; Ebenezer Hunt, Danvers; Edward B. Peirson, Salem; Augustus Torrey, Beverly.

FRANKLIN.—Drs. David Bradford, Montague; Charles M. Duncan, Shelburne; Charles L. Knowlton, Ashfield; J. W. D. Osgood, Greenfield.

HAMPDEN.—Drs. Nathan Adams, Springfield; T. L. Chapman, Longmeadow; Alvan Smith, Monson; John Witter, Brimfield.

HAMPSHIRE.—Drs. Edward B. Barrett, Northampton; Francis C. Green, Joseph W. Winslow, Easthampton.

MIDDLESEX NORTH.—Drs. John C. Bartlett, North Chelmsford; Elisha Huntington, Lowell; Austin Marsh, Carlisle; Charles A. Savory, Joel Spalding, Lowell.

MIDDLESEX EAST.—Drs. A. Chapin, Winchester; J. M. Harlow, Woburn; Joseph D. Mansfield, South Reading; Horace P. Wakefield, Reading.

MIDDLESEX SOUTH.—Drs. Henry Bigelow, Newton Corner; Henry Cowles, Saxonville; James C. Dorr, Medford; Richard L. Hodgdon, West Cambridge; Anson P. Hooker, East Cambridge; William B. Morris, Charlestown; John T. G. Nichols, Cambridge; John L. Sullivan, Malden; John E. Tyler, Somerville; Royal S. Warren, Waltham; Morrill Wyman, Cambridge.

NORFOLK.—Drs. Eben. P. Burgess, Dedham; Benjamin Cushing, Dorchester: Joseph G. S. Hitchcock, Foxboro'; Christopher C. Holmes, Milton; Edward Jarvis, Dorchester; Benjamin Mann, Roxbury; A. LeB. Munroe, Medway; Josiah Noyes, Needham; Ebenezer Stone, Walpole.

PLYMOUTH.—Drs. Josiah S. Hammond, Plympton; Asa Millett, Bridgewater; Nelson B. Tanner, Abington; James Wilde, Duxbury.

SUFFOLK.—Drs. S. L. Abbot, J. Ayer, J. Bigelow, H. J. Bigelow, H. I. Bowditch, B. Brown, C. E. Buckingham, S. Cabot, H. G. Clark, Boston; P. M. Crane, East Boston; C. Ellis, J. Flint, Boston; J. B. Forsyth, Chelsea; A. A. Gould, *President*, A. B. Hall, G. Hayward, C. D. Homans, *Corresponding Secretary*, J. Homans, J. B. S. Jackson, J. Jeffries, F. Minot, *Treasurer*, W. W. Morland, E. Palmer, G. C. Shattuck, D. H. Storer, J. B. Upham, C. E. Ware, J. M. Warren, A. A. Watson, H. W. Williams, Boston; W. G. Wheeler, Chelsea.

WORCESTER.—Drs. Nelson Carpenter, Warren; C. P. Fiske, Fiskedale; Henry A. Jewett, Northboro'; Francis Leland, Milford; Ephraim Lovell, West Boylston; Joseph Sargent, Worcester; M. D. Southwick, Blackstone; Edward M. Wheeler, Spencer.

WORCESTER NORTH.—Drs. Thomas R. Boutelle, Fitchburg; C. C. Field, Leominster; Alfred Hitchcock, Fitchburg; Jas. O. Parker, Shirley.

Censors.

BARNSTABLE.—Drs. Nathan Barrows, Sandwich; Samuel H. Gould, Brewster; G. N. Munsell, West Harwich; Geo. Shove, Yarmouth Port; Thomas N. Stone, Wellfleet.

BERKSHIRE.—Drs. Frank A. Cady, Pittsfield; C. C. Holcomb, Lee; H. M. Holmes, South Adams; Andrew M. Smith, Williamstown.

BRISTOL NORTH.—Drs. John R. Bronson, Attleboro'; John B. Chace, Henry B. Hubbard, Taunton.

BRISTOL SOUTH.—Drs. Edward P. Abbé, New Bedford; W. W. Comstock, Middleboro'; Joseph Haskell, Rochester; Frederick H. Hooper, Benjamin F. Wilson, New Bedford.

ESSEX NORTH.—Drs. Francis A. How, Newburyport; Oliver S. Lovejoy, Haverhill; George W. Sargent, Lawrence; Morris Spofford, Groveland; Orin Warren, West Newbury.

ESSEX SOUTH.—Drs. James M. Nye, Lynn; H. Osgood Stone, Salem; Henry F. Whittemore, Marblehead.

FRANKLIN.—Drs. Edward Barton, Orange; Chenerey Puffer, Shelburne Falls; David Rice, Leverett.

HAMPDEN.—Drs. William G. Breck, William B. Miller, Springfield; P. L. B. Stickney, Chicopee; Henry R. Vaille, Springfield; John Witter, Brimfield.

HAMPSHIRE.—Drs. Franklin Bonney, Hadley; Samuel A. Fisk, Northampton; Benjamin F. Smith, Amherst.

MIDDLESEX NORTH.—Drs. William Grey, Tewksbury; Levi Howard, Chelmsford; Elisha Huntington, Charles A. Savory, Jeremiah P. Jewett, Lowell.

MIDDLESEX EAST.—Drs. A. Chapin, Winchester; Ephraim Cutter, *ex officio*, Horace P. Wakefield, Reading.

MIDDLESEX SOUTH.—Drs. C. H. Allen, Cambridgeport; Alfred Hosmer, Watertown; Harlin H. Pillsbury, Medford.

NORFOLK.—Drs. Ebenezer P. Burgess, Dedham; William C. B. Fifield, Dorchester; D. Wayland Jones, Medfield; Joel Seaverns, Harrison Square; Charles C. Tower, South Weymouth.

PLYMOUTH.—Drs. Josiah S. Hammond, Plympton; Benjamin Hubbard, Plymouth; James F. Richards, North Bridgewater.

SUFFOLK.—Drs. J. N. Borland, D. W. Cheever, H. F. Damon, F. E. Oliver, J. P. Reynolds, Boston.

WORCESTER.—Drs. Henry Clarke, Worcester; Benjamin H. Tripp, Rutland; C. A. Wilcox, Uxbridge; Rufus Woodward, Worcester.

WORCESTER NORTH.—Drs. James Coolidge, Athol Depot; James Emerson, Ashley; George Jewett, Fitchburg; Asahel A. Plympton, Shirley Village; Clinton Warner, Westminster.

Commissioners of Trials.

BARNSTABLE	George W. Doane	Hyannis.
BERKSHIRE	Henry Pratt	Lanesborough.
BRISTOL NORTH . .	John R. Bronson .	Attleborough.
BRISTOL SOUTH . . .	William A. Gordon	New Bedford.
ESSEX NORTH . . .	Jeremiah Spofford	Groveland.
ESSEX SOUTH . . .	George Choate . .	Salem.
FRANKLIN	A. C. Deane	Greenfield.
HAMPDEN	Nathan Adams . .	Springfield.
HAMPSHIRE	Daniel Thompson .	Northampton.
MIDDLESEX NORTH .	John O. Green . .	Lowell.

Middlesex East . .	H. P. Wakefield . .	Reading.
Middlesex South .	Wm. W. Wellington	Cambridge.
Norfolk	Ebenezer Alden . .	Randolph.
Plymouth	Timothy Gordon .	Plymouth.
Suffolk	Silas Durkee . . .	Boston.
Worcester	William Workman	Worcester.
Worcester North .	James O. Parker .	Shirley.

Officers of the District Medical Societies.

Barnstable.—Dr. Chauncy M. Hulbert, South Dennis, *President;* Dr. James B. Everett, Falmouth, *Vice-President;* Dr. Nathan Barrows, Sandwich, *Secretary;* Dr. Sam'l H. Gould, Brewster, *Treasurer.*

Berkshire.—Dr. Lucius S. Adams, Stockbridge, *President;* Dr. Oliver E. Brewster, Pittsfield, *Vice-President;* Dr. Wm. Warren Greene, Pittsfield, *Secretary;* Dr. Abner M. Smith, Pittsfield, *Treasurer.*

Bristol North.—Dr. Joseph Murphy, Taunton, *President;* Dr. Henry B. Hubbard, Taunton, *Vice-President;* Dr. Nomus Paige, Taunton, *Secretary and Treasurer;* Dr. Ira Sampson, Taunton, *Librarian.*

Bristol South.—Dr. F. D. Bartlett, So. Dartmouth, *President;* Dr. P. F. Doggett, Wareham, *Vice-President;* Dr. Frederick H. Hooper, New Bedford, *Secretary, Treasurer and Librarian.*

Essex North.—Dr. George W. Garland, Lawrence, *President;* Dr. Henry C. Perkins, Newburyport, *Vice-President;* Dr. Martin Root, Byfield, *Secretary and Treasurer;* Dr. Kendall Flint, Haverhill, *Librarian.*

ESSEX SOUTH.—Dr. Benjamin Cox, Jr., Salem, *President;* Dr. George A. Perkins, Salem, *Vice-President;* Dr. David Choate, Salem, *Secretary;* Dr. William Mack, Salem, *Treasurer;* Dr. William Neilson, Salem, *Librarian.*

FRANKLIN.—Dr. J. W. D. Osgood, Greenfield, *President;* Dr. Josiah Trow, Buckland, *Vice-President;* Dr. William Dwight, Bernardston, *Secretary, Treasurer and Librarian.*

HAMPDEN.—Dr. Cyrus Bell, Feeding Hills, *President;* Dr. Alfred Lambert, Springfield, *Vice-President;* Dr. Horatio G. Stickney, Springfield, *Secretary, Treasurer and Librarian.*

HAMPSHIRE.—Dr. William M. Trow, Haydenville, *President;* Dr. Austin W. Thompson, Northampton, *Vice-President;* Dr. James Dunlap, Northampton, *Secretary and Treasurer.*

MIDDLESEX NORTH.—Dr. Jonathan Brown, Tewksbury, *President;* Dr. Jeremiah P. Jewett, Lowell, *Vice-President;* Dr. George H. Whitmore, Lowell, *Secretary;* Dr. Nathaniel B. Edwards, North Chelmsford, *Treasurer;* Dr. Joel Spalding, Lowell, *Librarian.*

MIDDLESEX EAST.—Dr. J. M. Harlow, Woburn, *President;* Dr. S. A. Toothaker, Reading, *Vice-President;* Dr. Ephraim Cutter, Woburn, *Secretary;* Dr. Horace P. Wakefield, Reading, *Treasurer and Librarian.*

MIDDLESEX SOUTH.—Dr. Enos Hoyt, Framingham, *President;* Dr. Anson Hooker, East Cambridge, *Vice-President;* Dr. John T. G. Nichols, Cambridge, *Secretary;* Dr. B. F. D. Adams, Waltham, *Treasurer.*

NORFOLK.—Dr. Benjamin E. Cotting, Roxbury, *President;* Dr. Jonathan Ware, Milton, *Vice-President;* Dr. Edward Jarvis, Dorchester, *Secretary;* Dr. Ebenezer P. Burgess, Dedham, *Treasurer;* Dr. David S. Fogg, South Dedham, *Librarian.*

PLYMOUTH.—Dr. Paul L. Nichols, Kingston, *President;* Dr. Winslow Warren, Plymouth, *Vice-President;* Dr. Henry N. Jones, Kingston, *Secretary and Treasurer;* Dr. Francis Collamore, Pembroke, *Librarian.*

SUFFOLK.—Dr. J. Mason Warren, Boston, *President;* Dr. Francis Minot, Boston, *Vice-President;* Dr. John Green, Boston, *Secretary;* Dr. C. D. Homans, Boston, *Treasurer;* Dr. Calvin Ellis, Boston, *Librarian.*

WORCESTER.—Dr. Joseph Sargent, Worcester, *President;* Dr. Moses D. Southwick, Blackstone, *Vice-President;* Dr. Henry C. Prentiss, Worcester, *Secretary and Librarian;* Dr. Thomas H. Gage, Worcester, *Treasurer.*

WORCESTER NORTH.—Dr. Thomas R. Boutelle, Fitchburg, *President and Treasurer;* Dr. David Parker, Gardner, *Vice-President;* Dr. George D. Colony, Fitchburg, *Secretary and Librarian.*

CATALOGUE OF FELLOWS OF THE MASSACHUSETTS MEDICAL SOCIETY.

☞ *The list is intended to contain the Acting and Retired Members now residing in the State, and such as have retained membership after removal.*

Admitted.	Name.	Residence.	Retired.
1855	Abbot, Ezra	Canton	
1851	Abbot, Oscar D.	Rockport	
1841	Abbot, Samuel L.	Boston	
1840	†Abbott, Jehiel	Westfield	1859
1862	Abbott, Samuel Warren	Woburn	
1865	Adams, B. F. D.	Waltham	
1855	Adams, Zabdiel B.	Boston	
1851	Adams, Lucius S.	Stockbridge	
1847	Adams, Nathan	Springfield	
1847	Ainsworth, F. S.	Boston	
1818	Alden, Ebenezer	Randolph	
1829	Alden, Samuel	Bridgewater	
1835	Alexander, Andrew	South Boston	
1860	Allen, A. N.	Pittsfield	
1843	Allen, Charles H.	Cambridgeport	
1852	Allen, Ira	Roxbury	
1859	Allen, Justin	Topsfield	
1846	Allen, Louis	Belchertown	
1842	Allen, Nathan	Lowell	
1862	Allen, William George	Mansfield	
1830	*Almon, William*	Halifax, N. S.	
1860	Ames, Jos. S.	Holden	
1864	Anderson, Alexander	River John, N. S.	
1822	Andrews, John	Boylston	
1860	Andrews, Robert	Orange	
1833	Appleton, John	West Newbury	
1861	Arnold, George J.	Roxbury	
1864	Arnold, J. S.	Dedham	
1850	*Arnold, S. A.*	Providence, R. I.	
1864	Arnold, J. S.	Dedham	
1846	Atkinson, Josiah	Newburyport	
1837	Atwood, George B.	Fairhaven	
1841	Ayer, James	Boston	
1837	Babbitt, Nathan S.	North Adams	
1846	Bachelder, John	Marion	
1864	Bachelder, Sam'l F.	South Danvers	
1842	Bacon, Amasa D.	Sharon	

Admitted.	Name.	Residence.	Retired.
1841	Bacon, John	Boston	
1863	Balch, Galusha B.	Sheffield	
1835	Ball, Stephen	Boston	
1837	Bancroft, Amos B.	Charlestown	
1864	Bancroft, Kirk A.	Lowell	
1854	Barker, Bowen	South Hanson	
1864	Barnes, Chas. W.	Grafton.	
1855	Barnes, John	Milford	
1828	Barrett, Benjamin	Northampton	
1861	Barrett, Edward B.	Northampton	
1863	Barrows, Nathan	Sandwich	
1861	Barstow, Noyes	Bernardston	
1839	Bartlett, Francis D.	South Dartmouth	
1831	Bartlett, Henry	Roxbury	
1833	Bartlett, John C.	Chelmsford	
1846	Bartlett, Joseph E.	Boston	
1823	Bartlett, Josiah	Concord	
1841	Barton, Edward	South Orange	
1842	*Barton, John Rhea*	Philadelphia	
1864	Bass, William	Lowell	
1861	Bates, Joseph N.	Worcester	
1852	Bates, Stephen	Charlemont	
1852	Beach, John C.	Montague	
1842	Bell, Artemas	Southampton	
1846	Bell, Cyrus	Feeding Hills	
1853	*Bell, Theodore S.*	Louisville, Ky.	
1858	Bement, Jno. W.	Belchertown	
1839	Bemis, Charles V.	Medford	
1834	Bemis, Jonathan W.	Charlestown	
1857	Bemis, Merrick	Worcester	
1847	Bennett, A. W.	Uxbridge	
1836	Bethune, George A.	Boston	
1853	Bickford, Hezekiah C.	Charlestown	
1847	Bigelow, George F.	Boston	
1839	Bigelow, Henry	Newton Corner	
1844	Bigelow, Henry J.	Boston	
1813	Bigelow, Jacob, Pres.	Boston	
1864	Billings, Lucius F.	Barre	
1861	Blake, John G.	Boston	
1852	Blanchard, Albert H.	Sherburne	
1840	Blanchard, Henry	Neponset	
1850	Bonney, Franklin	Hadley	
1853	Borland, John N.	Boston	
1859	Both, Carl	Boston	
1827	†Boutelle, Thomas R.	Fitchburg	1860
1835	Bowditch, Henry I.	Boston	
1863	Bowles, Stephen Wallace	Boston	
1859	Boynton, Royal B.	Townsend	
1828	Boyden, Wyatt C.	Beverley	
1839	†Boylston, Ward N.	Princeton	1849
1852	Bradford, David	Montague	
1839	Braman, Isaac G.	Brighton	
1862	Bradley, Wm. H.	Lowell	
1861	Bradt, Jas. G.	Lowell	
1854	Breck, William G.	Springfield	
1860	Breed, B. B.	Lynn	
1825	†Brewster, John M.	Pittsfield	1853

Admitted.	Name.	Residence.	Retired.
1858	Brewster, John M., jr.	Palmer Depot	
1852	Brewster, Oliver E.	Pittsfield	
1789	Brickett, James	Haverhill	
1852	Bronson, John R.	East Attleboro'	
1836	†Brown, Artemas Z.	Cambridgeport	1853
1844	Brown, Buckminster	Boston	
1864	Brown, Francis F.	Reading	
1861	Brown, Francis H.	Boston	
1863	Brown, Fred. D.	Webster	
1857	Brown, Orlando F.	Medway	
1846	Brown, Jonathan	Tewksbury	
1862	Brown, Wm. Symington	Greenwood	
1839	Browne, Charles H.	Boston	
1832	†Brown, Sylvanus	Lynn	1835
1844	Buckingham, C. E.	Boston	
1864	Bullard, Alfred R.	Dedham	
1865	Bundy, Frank	Billerica	
1846	Burdett, George W.	Clinton	
1854	Burgess, E. P.	Dedham	
1859	Burleigh, W. H.	Lawrence	
1861	Burnett, Elisha G.	Webster	
1863	Burnham, Walter	Lowell	
1856	Bushnell, William	Boston	
1860	Buttrick, J. F.	Block Island, R. I.	
1830	Burnap, Sewall G.	Holliston	
1843	Cabot, Samuel, jun.	Boston	
1848	Cady, Franklin A.	Pittsfield	
1862	Calkins, Marshall	Springfield	
1858	Campbell, Benj. F.	East Boston	
1835	†Campbell, Patrick P.	Chelmsford	1859
1862	Carney, Sydney H.	Boston	
1848	†Carpenter, Benoni	Pawtucket	1864
1822	Carpenter, Elijah W.	New York	
1863	Carpenter, Marcus S.	Norton	
1832	†Carpenter, Nelson	Warren	1860
1845	†Carpenter, Seba A.	N. Attleborough	1852
1861	Cass, Jonathan	Gt. Barrington	
1858	Chace, John B.	Taunton	
1845	*Chadbourne, Thomas*	Concord, N. H.	
1854	Chaffee, C. C.	Springfield	
1852	Chamberlain, Cyrus N.	Northampton	
1812	†Champion, Reuben	West Springfield	1853
1814	†Channing, Walter	Boston	1854
1836	Chapin, Alonzo	Winchester	
1863	Chapin, Henry C.	Lincoln	
1860	Chapin, Horace	Somerville	
1842	Chaplin, Daniel	N. Bridgewater	
1846	Chapman, Thomas L.	Longmeadow	
1846	Chase, Hiram L.	Cambridge	
1856	Chase, Ira E.	Haverhill	
1858	Chase, Preston M.	Danvers	
1836	*Cheeseman, John*	New York	
1858	Cheever, David W.	Boston	
1830	*Chervin Nicholas*	Paris, France	
1811	Childs, Henry H.	Pittsfield	
1863	Choate, David	Salem	

Admitted.	Name.	Residence.	Retired.
1826	Choate, George	Salem	
1850	Choate, George C. S.	Taunton	
1817	†Clark, Atherton	East Hampton	1850
1835	Clark, Henry G.	Boston	
1855	Clark, Henry	Worcester	
1836	Clark, Luther	Boston	
1851	Clark, Rowse R.	Whittonsville	
1833	Clark, Sir James	London	
1847	Clarke, Edward H.	Boston	
1846	Cleveland, Charles D.	Boston	
1865	Cleaveland Dan. A.	West Tisbury	
1843	Clough, John	Boston	
1840	†Clough, Willard, jun.	Pittsfield	1854
1850	Codman, Benjamin S.	Boston	
1843	Codman, Willard W.	Boston	
1844	Coffin, William S.	Boston	
1832	Cogswell, George	Bradford	
1846	Cogswell, William	Georgetown	
1835	Coit, Daniel T.	Boston	
1847	Collamore, Francis	No. Pembroke	
1855	Collins, Clarkson T.	Great Barrington	
1854	Colony, George D.	Fitchburg	
1846	Comstock, W. W.	Middleborough	
1854	Coolidge, Algernon	Boston	
1856	Coolidge, James	Athol Depot	
1837	Cotting, Benjamin E.	Roxbury	
1831	Cox, Benjamin, jun.	Salem	
1862	Corey, Charles G.	Royalston	
1865	Cornish, Aaron	New Bedford	
1852	*Copland James*	London	
1856	Cowles, H.	Saxonville	
1839	Crane, Phineas M.	East Boston	
1848	*Crosby Josiah*	Manchester, N. H.	
1859	Crehore, C. F.	Boston	
1864	*Crosby, Dixi*	Hanover, N. H.	
1856	Crowell, John, jun.	Haverhill	
1850	Cross, Enoch	Newburyport	
1840	Cummings, J. A.	Boston	
1832	†Cunningham, E. L.	Boston	1846
1843	Currier, William J.	Lexington	
1861	Curtis, Hall	Boston	
1849	Cushing, Benjamin	Dorchester	
1862	Cushing Jos. Whitney	Boston	
1856	Cutter, Ephraim	Woburn	
1839	†Cutler, William W.	Reading	1849
1840	Dale, William J.	Boston	
1862	Damon, Howard Franklin	Boston	
1850	Dana, David	Lawrence	
1836	†Dana, Francis	Boston	1854
1845	Davidson, Herman E.	Gloucester	
1842	†Davis, Amasa	Palmer	
1864	Davis, Orvis O.	No. Andover	
1862	Dean, Eben. A.	Montague	
1813	†Dean, Oliver	Framingham	1844
1844	Dean, James B.	North Easton	
1860	Dean, John	Boston	

Admitted.	Name.	Residence.	Retired.
1852	Deane, A. C.	Greenfield	
1839	†Dearborn, Abraham D.	Cliftondale	1861
1832	*De Ferman, M.*	Paris	
1836	*Delafield, Edward*	New York	
1863	Denny, James Henry	Somerville	
1846	Denison, George W.	Chicopee	
1834	†Denniston, Edward E.	Northampton	1865
1862	Derby, Hasket	Boston	
1844	Derby, George	Augusta, Me.	
1860	De Wolf, Oscar C.	Pittsfield	
1841	De Wolf, T. K.	Chester Centre	
1847	Dickerman, Lemuel	Foxborough	
1846	Dickey, Hanover	Lowell	
1837	Dix, John H.	Boston	
1846	Doane, George W.	Hyannis	
1841	Dodge, Franklin	Harwich	
1839	Doggett, Perez F.	Wareham	
1864	Dole, John	South Reading	
1861	Dole, Francis F.	Methuen	
1852	Dorr, James C.	Medford	
1846	Downes, Nathaniel	Hanover	
1850	Dow, Darius A.	Shirley	
1860	Dow, John O.	Harvard	
1852	Draper, Abijah W.	W. Roxbury	
1858	Draper, Joseph	Worcester	
1857	Drew, David F.	Lynn	
1844	Drew, S. Watson	Woburn	
1865	Driver, Stephen W.	Cambridge	
1811	†Drury, Benjamin	Spencer	1832
1865	Drowne, H. W.	Richmond	
1862	Drummond, Thos. Menzies	Boston	
1836	*Dudley, Benjamin W.*	Lexington, Ky.	
1841	Duncan, Charles M.	Shelburne	
1838	Duncan, Samuel	Williamstown	
1836	*Dunglison, Robley*	Philadelphia	
1852	Dunlap, James	Northampton	
1837	Dupee, Horace	Boston	
1842	Durkee, Silas	Boston	
1862	Dwight, William	Bernardston	
1849	Dyer, Jonah Franklin	Gloucester	
1847	Eastham, Charles	Boston	
1851	Eastman, Edmund T.	Boston	
1861	Eayres, Chas. G. A.	Tyngsborough	
1847	Edwards, Nathaniel B.	N. Chelmsford	
1850	Ellis, Calvin	Boston	
1863	Emerson, James	Ashby	
1862	Everett, James B.	Falmouth	
1865	Everett, William S.	Fairmount	
1855	Fabyan, George	Boston	
1835	Farnum, Joseph, jun.	Salem	
1848	Faulkner George	Jamaica Plain	
1837	Fay, Allen C.	Milford	
1861	Fearing, Benjamin, jun.	Wareham	
1829	†Fearing, Elisha P.	Nantucket	1860
1838	†Ferre, Henry	Dalton	

Admitted.	Name.	Residence.	Retired.
1863	**Fenn, Artemas Ira**	**Boston**	
1858	Ferguson, Hugh	So. Boston	
1839	Field, Caleb C.	Leominster	
1807	†Fifield, Noah	Weymouth Landing	
1858	Fifield, W. C. B.	Harrison Square	
1862	Fisher, Theodore Willis	So. Boston	
1847	**Fiske, Calvin P.**	Fiskedale	
1865	Fiske, Daniel S.	East Brookfield	
1852	Fisk, Samuel A.	**Northampton**	
1839	Fiske, Robert T. P.	**Hingham**	
1837	†Fitch, Worham L.	**Springfield**	
1861	Fletcher, Samuel W.	**Pepperell**	
1863	Fletcher, Wm. K.	**Fitchburg**	
1829	Flint, John	**Boston**	
1847	**Flint, John Sydenham**	**Roxbury**	
1841	**Flint, Kendall**	**Haverhill**	
1856	**Fobes, Joseph B.**	**Bridgewater**	
1847	**Fogg, David S.**	**Dedham**	
1851	Fogg, John S. H.	**South Boston**	
1846	Folts, Daniel V.	**East Boston**	
1839	†Ford, Oliver	**Hyannis**	1852
1835	Forsyth, James B.	**Chelsea**	
1856	Forsaith, Francis F.	**Weymouth**	
1859	Foss, Stephen	**Boston**	
1841	Foster, Charles F.	**Cambridge**	
1844	**Foster, Fordyce**	**Cohasset**	
1840	**Foster, James W.**	**No. Attleborough**	
1857	**Foster, James M.**	**Wilbraham**	
1848	**Francis, Tappan E.**	**Brookline**	
1839	**French, Nathan**	**Malden**	
1860	French, John O.	Hanover	
1864	Frothingham, Geo. E.	No. Becket	
1860	Fuller, H. H.	Charlestown	
1842	†Fuller, Milton	Boston	
1856	Gage, Daniel Parker	Lowell	
1851	Gage, Edward	Woburn	
1854	Gage, Thomas H.	Worcester	
1839	Gale, Stephen M.	Newburyport	
1852	Galloupe, Isaac F.	Lynn	
1843	†Gardner, Johnson	Pawtucket	
1863	Garceau, Treffle	Charlestown	
1858	Garland, G. W.	Lawrence	
1854	Garland, Joseph	Gloucester	
1849	Garratt, Alfred C.	Boston	
1864	Gavin, Michael F.	Boston	
1848	Gay, George H.	Boston	
1836	*Geddings, E.*	Charleston, S. C.	
1847	Gersdorff, B. V.	Salem	
1854	Gifford, Silas S.	E. Stoughton	
1854	Gilbert, John Henry	Quincy	
1840	Gile, Daniel	Marblehead	
1849	†Godding, Alvah	Winchendon	1862
1858	Godding, W. W.	Fitchburg	
1847	†Gooch, William B.	South Dennis	
1859	Goodell, John W.	Greenwich	
1847	**Goodnough, Levi**	**Sudbury**	

Admitted.	Name.	Residence.	Retired.
1822	†Goodman, Otis	South Hadley	1830
1834	Gordon, Charles	Boston	
	Gordon, Timothy	Plymouth	
1835	Gordon, William A.	New Bedford	
1832	Gould, Abraham	Lynn	
1832	Gould, Augustus A.	Boston	
1851	†Gould, Humphrey	Rowe	1858
1858	Gould, Joshua B.	Templeton	
1859	Gould, Joseph F.	South Boston	
1846	Gould, Samuel H.	Brewster	
1832	Graves, John W.	Chelsea	
1861	Gray, Adoniram J.	Rowley	
1834	Gray, Francis H.	Boston	
1861	Gray, William	Tewksbury	
1854	Green, F. C.	Northampton	
1811	†Green, John	Worcester	
1858	Green, John	Boston	
1827	Green, John O.	Lowell	
1826	†Green, Joshua	Groton	1857
1856	Green, Samuel A.	Boston	
1864	Greene, James Sumner	Milton	
1846	Greene, Moses C.	Boston	
1864	Greene, Nath'l, jun.	Boston	
1841	†Greene, William	N. Falmouth	1853
1863	Greene, W. W.	Pittsfield	
1849	Greer, Robert	Boston	
1831	†Gregg, Samuel	Boston	
1858	Griggs, Thomas T.	Grafton	
1820	†Grosvenor, David A.	Reading	
1840	Grosvenor, D. A., jun.	Danvers	
1830	†Grosvenor, John M.	Methuen	
1864	Grosvenor, John Milton	Woburn	
1840	†Guilford, Jonas	Spencer	1853
1848	Hadduck, Charles	Beverly	
1846	Hagar, Joseph S.	E. Marshfield	
1846	Hall, Adino B.	Boston	
1836	*Hall, William.*	Baltimore	
1835	Hamilton, Erastus D.	Conway	
1840	Hammond, Josiah S.	Plympton	
1863	Hammond, L. H.	Oakham	
1864	Hanks, H. T.	Royalston	
1846	Harlow, E. A. W.	Boston	
1847	Harlow, James F.	Boston	
1861	Harlow, John M.	Woburn	
1842	Harris, Jonas C.	W. Cambridge	
1863	Hart, John	Boston	
1859	Hartley, James W.	Fall River	
1832	†Harwood, Daniel	Boston	
1861	Hartnett, Maurice K.	Boston	
1837	Haskell, Benjamin	Rockport	
1839	Haskell, Joseph	Rochester	
1837	*Hastings, Charles*	Worcester, Eng.	
1851	Hawks, Elihu S.	North Adams	
1829	†Hayden, John C.	Cambridge	
1859	Hay, Gustavus	Boston	
1851	***Hayes, Augustus A.***	Boston	

Admitted.	Name.	Residence.	Retired.
1858	Hayward, Jno. McLean...	Boston	
1843	Hayward, George.....	Boston	
1857	Hayward, Nathan.....	Roxbury	
1858	Head, George E.....	Amherst	
1859	Heard, J. Theodore	Boston	
1844	Heard, John.....	Townsend	
1842	Heaton, George	Boston	
1842	†Hedge, Josiah D.	Cambridge	1846
1855	Henderson, Jophanus.....	Somerville	
1862	Herrick, G. H. W.	Charlestown	
1886	*Hewson, Thomas T.*	Philadelphia	
1822	Heywood, Benjamin F. ...	Worcester	
1853	Hildreth, Charles H.	Williamsburg	
1858	Hill, Gardner C.	Warwick	
1854	Hill, John B.	Boston.....	
1839	Hitchcock, Alfred.....	Fitchburg	
1853	Hitchcock, Joseph G. S. ..	Foxborough	
1864	Hitchcock, Thomas B.	Boston	
1852	Hobbs, Alvah	Boston	
1825	†Hodges, Isaac	North Adams	1846
1853	Hodges, Richard M.	Boston	
1854	Hodgdon, Richard L.	West Cambridge ...	
1836	*Hodgkin, Thomas*	London	
1854	Hoffendahl, H. L. H.	Boston.....	
1836	*Holbrook, John E.*	Charleston, S. C. ...	
1862	Holbrook, Silas P.	East Douglass	
1854	Holbrook, William.....	Palmer Depot.....	
1855	Holcomb, C. C.....	Lee.....	
1846	*Holland, Henry*.....	London	
1834	†Holman, Eliakim A.	Harvard.....	
1855	Holman, Silas A.....	Taunton.....	
1859	Holmes, A. R.....	New Bedford	
1841	Holmes, Christopher C. ..	Milton	
1848	Holmes, Howland	West Cambridge....	
1858	Holmes, H. M.	South Adams.....	
1836	Holmes, Oliver W.....	Boston	
1846	Holt, Daniel.....	Lowell.....	
1850	Homans, Charles D.	Boston	
1820	Homans, John.....	Boston.....	
1862	Homans, John, Jr.	Boston	
1865	Homer, John		
1826	Hooker, Anson	East Cambridge	
1855	Hooker, Anson P.....	East Cambridge	
1821	†Hooker, George.....	Longmeadow	1853
1839	Hooper, Foster	Fall River.....	
1859	Hooper, Fred. H.	New Bedford	
1836	Hooper, Robert W.	Boston	
1840	†Hopkins, Lewis S.	Northampton	1842
1860	Hoskins, T. H.	Boston.....	
1856	Hosmer, Alfred	Watertown	
1852	†Hovey, Daniel	Greenfield.....	1856
1843	Howard, Frederick.....	Randolph	
1849	Howard, Levi.....	Chelmsford	
1851	Howarth, James.....	Andover	
1823	†Howe, Appleton	So. Weymouth.....	1859
1848	Howe, Charles.....	Taunton.....	
1840	Howe, Estes.....	Cambridge.....	

Admitted.	Name.	Residence.	Retired.
1854	Howe, Francis A.	Newburyport	
1832	†Howe, Samuel G.	Boston	1850
1854	Hoyt, Ahira B.	Gloucester	
1848	Hoyt, Enos	Framingham	
1844	Hubbard, Benjamin	Plymouth	
1837	Hubbard, George	Boston	
1861	Hubbard, Henry B.	Taunton	
1860	Hubon, Peter E.	Worcester	
1848	Huckins, David T.	Watertown	
1854	Hulbert, Chauncy M.	South Dennis	
1830	†Hunt, Ebenezer	Danvers Port	1860
1848	Hunt, Otis E.	Waltham	
1839	Huntington, Elisha	Lowell	
1859	Hurd, Samuel H.	Charlestown	
1856	Hurd, Yorick G.	Amesbury	
1863	Hurley, John F.	Boston	
1864	Hutchins, Isaiah	West Acton	
1858	Hutchins, John W.	So. Framingham	
1856	Hyde, George S.	Boston	
1840	Hyndman, James	Boston	
1836	Inches, Herman B.	Boston	
1863	Ingalls, Paschal P.	South Boston	
1836	Ingalls, William	Boston	
1863	Ireland, Edward Dillon	Lowell	
1843	Jackson, Alexander	Plymouth	
1833	Jackson, Charles T.	Boston	
1802	Jackson, Jas., Pres.	Boston	
1832	Jackson, J. B. S.	Boston	
1836	*Jackson, Samuel*	Philadelphia	
1812	†James, Benjamin	Weston	1844
1863	Jameson, Robert Edwin	Woburn	
1833	Jarvis, Edward	Dorchester	
1854	Jarvis, John F.	Boston	
1858	Jeffries, B. J.	Boston	
1826	Jeffries, John	Boston	
1854	Jenks, Thos. L.	Boston	
1864	Jenkins, Alvan	Great Falls, N. H.	
1849	Jennings, John Henry	New Bedford	
1856	Jewett, Charles C.	Holliston	
1850	Jewett, Frederic A.	Shrewsbury	
1848	Jewett, George	Fitchburg	
1849	Jewett, Henry A.	Northborough	
1839	Jewett, Jeremiah P.	Lowell	
1865	Johnson, Geo. Whitefield.		
1818	†Johnson, Jonathan G.	Newburyport	1861
1840	Johnson, Joshua J.	Keene, N. H.	
1845	Johnson, Othello O.	Framingham	
1817	Johnson, Samuel	Salem	
1849	Johnson, William O.	Boston	
1856	Jones, D. Wayland	Medfield	
1846	Jones, George S.	Boston	
1849	Jones, Henry N.	Kingston	
1843	Jones, Joseph S.	Boston	
1862	Jones, Maurice E.	Chelsea	
1835	†Jones, Nathan	Wenham	1857

Admitted.	Name.	Residence.	Retired.
1859	Jordan, Chas.	So. Reading	
1830	Keep, Nathan C.	Boston	
1846	Kelley, Elbridge G.	Newburyport	
1863	Kemble, Arthur	Salem	
1861	Kemp, Alba Enoch	North Prescott	
1855	Kendall, Albert A.	Newton Lower Falls	
1800	Kidder, Moses W.	Lowell	
1838	Kimball, Gilman	Lowell	
1846	Kimball, Walter H.	Andover	
1842	King, John B.	Nantucket	
1838	†Kinniston, Timothy	Haverhill	1857
1837	Kittredge, Benjamin F.	Hinsdale	
1845	Kittredge, Floyer G.	Harvard	
1861	Kittredge, F. R. C.	Waltham	
1830	†Kittredge, Ingalls	Beverly	1858
1834	†Kittredge, Theodore	Waltham	1862
1845	Kneeland, Samuel, Jr.	Boston	
1852	Knight, Nath'l J.	East Somerville	
1851	Knowlton, Charles L.	Ashfield	
1816	†Lamb, Dan	Charlton	1820
1847	Lamb, Wm. Dan.	Lawrence	
1848	Lambert, Alfred	Springfield	
1856	Lamson, John A.	Boston	
1837	†Lamson, Josiah	Essex	1852
1865	Langmaid, Sam'l W.	Cambridge	
1865	Lawton, T. C.	Hinsdale	
1851	Lawrence, George C.	Adams	
1846	†Lawrence, William R.	Boston	1857
1856	Leach, William	Holmes's Hole	
1839	Learned, E. T.	Fall River	
1865	Leavitt, W. W.	West Stockbridge	
1843	†Lee, Henry S.	Boston	1864
1844	Leland, Francis	Milford	
1851	†Leland, Phinehas W.	Fall River	1861
1819	†Leonard, George	Taunton	1852
1831	Leonard, Jonathan	Sandwich	
1850	Leonard, Marcus B.	East Boston	
1851	Lester, William	South Hadley	
1861	Lewis, F. B. A.	Watertown, N. Y.	
1827	†Lewis, Winslow	Boston	1860
1865	Lincoln, David F.	Boston	
1859	Lincoln, Geo. Cooke	Natick	
1864	Lincoln, W. H.	Hubbardston	
1859	Livermore, Abel C.	Stow	
1862	Livingston, Alfred	Lowell	
1864	Lombard, Jos. Stickney	Boston	
1824	†Longley, Rufus	Haverhill	1852
1862	Lord, Friend Drake	Sterling	
1864	Loring, Edw. Greeley, Jr.	Boston	
1844	†Loring, George B.	Salem	1854
1840	Lothrop, John L.	Provincetown	
1833	*Louis, P. Ch. A.*	Paris	
1856	Lovejoy, Oliver S.	Haverhill	
1838	Lovell, Ephraim	West Boylston	
1836	*Luzemburgh, Henry*	New Orleans	

Admitted.	Name.	Residence.	Retired.
1846	Lyman, George H.	Boston	
1855	Lynde, James P.	Athol	
1858	Lyons, Charles F.	Waverly, N. Y.	
1863	Mack, David, Jr.	Belmont	
1840	Mack, William	Salem	
1863	MacGregor, Murdoch	Boston	
1824	†Mackie, Andrew	New Bedford	1860
1850	Mackie, John H.	New Bedford	
1864	Mackie, Wm. Basilio	Boston	
1840	Mann, Benjamin	Roxbury	
1843	Mann, Cyrus S.	Newton Corner	
1852	Mann, Jonathan	South Boston	
1842	Mann, Samuel	Boston	
1862	Manley, Edwin	Stoneham	
1854	Manning, Joseph	Rockport	
1864	Mantville, Alfred	Hatfield	
1841	Mansfield, Joseph D.	South Reading	
1863	Marcy, Henry Orlando	Cambridge	
1859	Marrisul, Felix V.	Fall River	
1839	Marsh, Austin	Carlisle	
1858	Marsh, Lebbeus Eaton	Granby	
1831	†Marshall, Jonas A.	Fitchburg	1864
1825	†Marshall, Silas	Templeton	1832
1840	Marston, Ephraim	Cambridgeport	
1852	Martin, Alex. D. W.	Boston	
1846	Martin, Henry Austin	Roxbury	
1838	†Martin, Henry J.	Boston	1856
1852	Martin, Oramel	Worcester	
1863	Martin, Saxton P.	New Braintree	
1844	Mason, Augustus	Brighton	
1855	Mason, William	Charlestown	
1850	Matthes, Gustavus F.	New Bedford	
1848	Mattson, Morris	New York	
1834	*Maunoir, J. P.*	Geneva, Switz.	
1849	*Mauran, Joseph*	Providence	
1849	Maynard, John P.	Dedham	
1856	McCollister, J. Q. A.	Groton Junction	
1864	McDougall, Sam'l J.	Boston	
1864	McLaughlin, Jas. Augustin	Boston	
1855	McLean, A. S.	Springfield	
1864	McSheehy, John J.	Boston	
1861	Meacham, Franklin	W. Stockbridge	
1860	Mead, M. S.	Northfield	
1863	Merriam, Jos. Waite	Portsmouth, R. I.	
1831	Metcalf, John G.	Mendon	
1842	Mifflin, Charles	Boston	
1854	Mighill, Stephen	Boston	
1846	Mignault, Pierre B.	Worcester	
1851	Miller, Alfred	Fitchburg	
1838	Miller, Erasmus D.	Dorchester	
1851	Miller, J. Leland	Pittsfield	
1848	*Miller, Lewis L.*	Providence, R. I.	
1845	Millett, Asa	Bridgewater	
1860	Mills, C. D.	Pittsfield	
1855	Miner, David W.	Ware	
1845	Minot, Francis	Boston	

Admitted.	Name.	Residence.	Retired.
1862	Mitchell, H. Hedge	East Bridgewater	
1844	†Mitchell, Jacob	Chelsea	1865
1861	Moffatt, Geo. T.	Boston	
1864	Montville, Alfred	Hatfield	
1845	†Moody, George	Georgetown	1860
1848	†Moore, Edward B.	Boston	1862
1851	Moore, Ira L.	Boston	
1861	Moore, Jas. M.	South Groton	
1842	Morgan, Leonard	Leyden	
1831	Moriarty, John M.	E. Boston	
1842	Morland, Wm. W.	Boston	
1830	Morrill, Samuel	Boston	
1854	Morris, W. B.	Charlestown	
1843	Morse, Horatio G.	Roxbury	
1854	Morse, J. R.	North Cambridge	
1846	Morse, Luther B.	Watertown	
1853	Morton, Lloyd	Pawtucket	
1828	†Mulliken, Isaac W.	Stow	1834
1860	Munsell, G. W.	West Harwich	
1834	Munroe, A. Le Baron	Medway	
1863	Munn, Curtis Emerson	Westfield	
1859	Murphy, Joseph	Taunton	
1830	*Mussey, Reuben D.*	Boston	
1856	Neilson, William	Manchester, N. H.	
1862	Nelson, Abiel W.	Mystic, Ct.	
1865	Nelson, Daniel Thurber		
1853	Nelson, George	Bellingham	
1830	*Nelson, J.*	Montreal	
1813	†Newell, Jonathan	Harvard	1846
1845	Newell, Robert W.	Boston	
1838	Newhall, Asa T.	Lynn	
1854	Newhall, Edward	Lynn	
1860	Nichols, Geo. H.	Boston	
1859	Nichols, John T. G.	Cambridge	
1841	†Nichols, Joseph D.	Palmer	1862
1820	†Nichols, Paul L.	Kingston	1857
1848	Nichols, Thomas G.	Freetown	
1847	Nihill, John L	South Boston	
1846	†Norcross, Josiah	South Reading	1864
1865	Norris, Albert L.		
1832	Noyes, Josiah	Needham	
1842	Nye, James M.	Lynn	
1861	O'Connell, Patrick A.	Boston	
1843	Oliver, Fitz Edward	Boston	
1855	Oliver, Henry Kemble	Boston	
1858	Orcutt, Almon M.	Hardwick	
1862	Ordway, John P.	Boston	
1841	Orr, Samuel A.	East Bridgewater	
1833	Osborn, George	Danvers	
1836	*Osgood, Daniel*	Havana, Cuba	
1852	Osgood, John W.	Saxonville	
1830	Osgood, Joseph	Danvers	
1842	Osgood, J. W. D.	Greenfield	
1856	Osgood, William	Boston	
1855	Otis, G. A.	Springfield	

Admitted.	Name.	Residence.	Retired.
1826	†Otis, George W	Chelsea	1860
1862	Owen, Varillus Linus	Springfield	
1865	Paddock, F. K	Pittsfield	
1855	Page, Calvin G	Boston	
1865	Page, John T	Winchenden	
1854	Page, William H.	Boston	
1864	Paige, Nomus	Taunton	
1854	†Paine, Isaac	Marshfield	1860
1840	Paine, Stephen A	Provincetown	
1845	Palmer, Edward D. G	Boston	
1832	Palmer, Ezra	Boston	
1829	†Palmer, Joseph	Boston	1863
1854	Palmer, John K	Cambridgeport	
1847	Parcher, Sewell F	East Boston	
1837	†Parker, Daniel	Billerica	1846
1839	Parker, David	Gardner	
1840	Parker, David M	Boston	
1864	Parker, Edgar	Saxonville	
1838	Parker, Hiram	Lowell	
1841	Parker, James O.	Shirley	
1847	Parker, Moses	Melrose	
1861	*Parker, Peter*	Washington, D. C.	
1848	Parks, Luther	Boston	
1863	Parks, W. H.	Great Barrington	
1837	*Parsons, Usher*	Providence, R. I.	
1856	Patridge, Louis E	Natick	
1860	Patee, Asa F	W Amesbury	
1852	Pattee, William S	Quincy	
1850	Patch, Franklin F	Boston	
1837	Peck, William D	Sterling	
1863	Peirce, Arthur G	Hinsdale	
1844	Peirson, Edward B.	Salem	
1854	Perkins, Edward A	Tyngsboro'	
1851	Perkins, George A.	Salem	
1830	Perkins, Henry C	Newburyport	
1839	†Perkins, John	Middleborough	1854
1832	†Perley, Daniel	Lynn	1864
1863	Perkins, George Thos.	Roxbury	
1851	Perry, Ira	West Medway	
1823	†Perry, Nathan	Cambridgeport	1830
1835	Perry, William F	Mansfield	
1860	Person, John W	Lowell	
1818	†Phelps, Abner	Boston	1847
1844	Phelps, Charles A	Boston	
1837	†Phelps, Eben S	Middleton	1852
1841	Phelps, Thaddeus	N Attleborough	
1837	†Phillips, Henry P	North Adams	1852
1841	Phinney, Erastus O	Melrose	
1845	†Pickett, Noble B	Great Barrington	1862
1836	*Picton, J. M. W.*	New Orleans	
1865	Pierce, Charles L	Ashburnham	
1839	†Pierce, Delano	Grafton	1847
1850	Pierce, George W	Leominster	
1840	Pierce, John	Edgartown	
1822	†Pierce, Nathaniel	Ashburnham	1839
1839	Pillsbury, Harlin	Lowell	

Admitted.	Name.	Residence.	Retired.
1859	Pillsbury, Harlin H.	Medford	
1861	Pillsbury, John M.	Lawrence	
1850	Pineo, Peter	Boston	
1848	†Plimpton, Daniel B.	North Oxford	1857
1861	Plympton, Ashael A.	Shirley	
1837	†Poole, Alexander	Chelsea	1865
1834	Porter, Joshua	North Brookfield	
1858	Porter, Royal N.	Deerfield	
1861	Pratt, Henry	Lanesborough	
1839	Pratt, Jefferson	Hopkinton	
1858	Prentiss, H. Conant	Worcester	
1864	Prescott, Benjamin T.	Boston	
1861	Prince, J. P.	Lynn	
1841	Prince, William H.	Northampton	
1859	Proctor, William B.	New Sharon, Me.	
1860	Provan, Robert	S. Boston	
1860	Prius, Peter	Lowell	
1851	Puffer, Chenery	Shelburne Falls	
1830	Putnam, Charles G.	Boston	
1863	Quimby, Elisha Hervey	Salem	
1853	Randall, George H.	N. Rehoboth	
1832	†Randall, Menzies R.	Rehoboth	1854
1857	Ranney, Mark	Somerville	
1863	Ransom, N. M	N. Carver	
1843	Read, William	Boston	
1852	Renton, George	Boston	
1849	†Renton, John	Lynn	1860
1823	Reynolds, Edward	Boston	
1853	Reynolds, John P.	Boston	
1863	Reynolds, Joseph Brown	Concord	
1853	Rice, David	Leverett	
1864	Rice, Frank H.	Worcester	
1855	Rice, J. Marcus	Worcester	
1855	Richards, James F.	Campello	
1839	Richardson, Aaron P.	Boston	
1845	Richardson, Eben C.	Ware	
1855	Richardson, Horace	Boston	
1839	†Richardson, Samuel	Watertown	1862
1861	Ricketson, Arthur	New Bedford	
1840	Rising, Henry H.	Westborough	
1836	Robbins, James W.	Uxbridge	
1863	Roberts, Michael	Lawrence	
1858	Robinson, Albert B.	Roxbury	
1838	Robinson, Erastus	Northbridge	
1858	Rockwood, Henry	Westford	
1859	Robinson, J. Henry	Southborough	
1859	Robinson, John L.	Wenham	
1862	Robinson, Thad. Pulaski	Newton Corner	
1861	*Roeser, Bernhard*	Athens, Greece	
1855	Rogers, Seth	Pomfret, Ct.	
1852	Rolfe, Enoch C.	Boston	
1864	Rood, James T.	Brookfield	
1834	†Root, Martin	Byfield	1862
1862	Roy, Joseph	Boston	
1858	Ruppaner, Antoine	Boston	

Admitted.	Name.	Residence.	Retired.
1825	†Russell, George	Boston	1856
1844	†Russell, Henry	New Bedford	1848
1862	Russell, Henry	New Bedford	
1854	Russell, Ira	Natick	
1844	Russell, Le Baron	Boston	
1860	Ryan, John	Charlestown	
1837	Sabin, Henry L.	Williamstown	
1837	†Sabin, Mellen	Lenox	1849
1837	Salisbury, Stephen, Jr.	Brookline	
1836	Salter, Richard H.	Boston	
1843	Sampson, Ira	Taunton	
1858	Sargent, George W.	Lawrence	
1850	Sargent, Howard	Boston	
1840	Sargent, Joseph	Worcester	
1851	†Sargent, Seneca	Lawrence	1863
1858	Saville, Henry M.	Boston	
1850	Savory, Charles A.	Lowell	
1859	Sawyer, Edward J.	Gardner	
1856	Sawyer, Frederick A.	Wareham	
1854	Sawyer, Jeremiah H.	Newburyport	
1860	Sawyer, John W.	Madison, Wis.	
1842	Scammell, Lucius L.	Hopkinton	
1839	Scribner, Isaac W.	Lowell	
1833	Seabury, Benjamin F.	Orleans	
1854	Seaverns, Joel	Jamaica Plain	
1861	Seyffarth, Edmund	Portsmouth, R. I.	
1853	Seymour, L. D.	Greenfield	
1852	Sharp, J. Caldwell	Boston	
1836	Shattuck, George C.	Boston	
1863	Shattuck, George Francis.	Peppcrell	
1863	Shattuck, Jon. Chamberlin.	Pepperell	
1852	Shaw, Benjamin S.	Boston	
1860	Shaw, Henry Lyman	Boston	
1827	†Shaw, Samuel	Plainfield	1852
1849	Shaw, Samuel	Wareham	
1861	Shipley, George T.	Boston	
1860	Sheldon, L. R.	Boston	
1846	Shove, George	Yarmouth Port	
1852	Shurtleff, Augustine	Brookline	
1834	Shurtleff, Nathaniel B.	Boston	
1857	Sinclair, Alexander D.	Boston	
1864	Sinclair, David F		
1836	*Simons, Benjamin B.*	Charleston, S. C.	
1864	Simmons, Marshall E.	Chatham	
1839	†Skilton, Benjamin	Lowell	1848
1863	Skinner, Edward M.	Boston	
1864	Skinner, John	Boston	
1848	Slade, Daniel D.	Boston	
1864	Smith, Abner M.	Pittsfield	
1842	†Smith, Alvan	Monson	1854
1840	†Smith, Alvah C.	Hamilton	1844
1856	Smith, Andrew M.	Williamstown	
1851	Smith, Benjamin F.	Amherst	
1854	Smith, D. P.	Springfield	
1855	Smith, G. O.	Haverhill	
1852	Smith, Israel N.	Haverhill	

Admitted.	Name.	Residence.	Retired.
1824	†Smith, Jerome V. C.	Boston	1862
1841	†Smith, John	Wales	1846
1853	Smith, John M.	Barnstable	
1836	*Smith, Nathan R.*	Baltimore	
1865	Smith, Norman	Groton	
1854	Smith, William G.	Cabotville	
1859	Smythe, James	Boston	
1846	Snow, George W.	Middleborough	
1863	Snow, Jesse W.	Danvers	
1856	Soule, H. S.	Winthrop	
1850	Southwick, M. D.	Millville	
1843	Sparhawk, Thomas	Amesbury	
1848	Sparrow, William E.	Mattapoisett	
1851	Spare, John	New Bedford	
1846	Spaulding, Joel	Lowell	
1849	Spaulding, Leonard	Millbury	
1844	Spaulding, Miles	Groton	
1825	†Spaulding, Stephen H.	Reading	1853
1817	†Spofford, Jeremiah	Groveland	1847
1863	Spofford, Morris	Groveland	
1820	†Spofford, Richard S.	Newburyport	1857
1824	Spooner, John P.	Milton	
1853	Sprague, Seth L.	Boston	
1864	Sprague, F. P.	Boston	
1858	Spring, C. H.	Boston	
1840	†Stacey, Philemon	Hatfield	1849
1846	Stacy, Horace	Boston	
1836	*Stanley, James*	London	
1836	†Stearns, George	Groton	1862
1852	†Stearns, Samuel	Greenfield	1838
1860	Stearns, John	Boston	
1855	Stedman, Charles E.	Dorchester	
1832	Stedman, Charles H.	Boston	
1864	Stedman, Joseph	Jamaica Plain	
1836	Stetson, James A.	Quincy	
1853	Stetson, John	West Harwich	
1845	Stevens, Calvin	Boston	
1859	Stevens, Francis	Haverhill	
1837	Stevens, John A.	Boston	
1851	Stevens, N. C.	Boston	
1832	Stevens, William F.	Stoneham	
1835	Stephenson, Ezra.	Hingham	
1852	Stickney, Charles D.	New Bedford	
1864	Stickney, Horatio G.	Springfield	
1854	Stickney, James M.	Pepperell	
1847	Stickney, P. L. B.	Chicopee	
1818	†Stimson Jeremy	Dedham	1857
1827	Stone, Ebenezer	Walpole	
1840	Stone, H. Osgood	Salem	
1831	†Stone, Jeremiah	Provincetown	1859
1854	Stone, Lincoln R.	Salem	
1861	Stone, Silas E.	Walpole	
1862	Stone, Thomas N.	Wellfleet	
1829	Storer, D. Humphreys	Boston	
1853	Storer, Horatio R.	Boston	
1852	Stratton, Elijah	Northfield	
1862	Street, Charles Carroll	Boston	

Admitted.	Name.	Residence.	Retired.
1847	Streeter, Jos. H.	Roxbury	
1858	Strickland, Rial	Fnfield, Ct.	
1862	Sturtevant, Charles	New Bedford	
1851	Sullivan, John L.	Malden	
1865	Swan, Chas. W	Boston	
1863	Swasey, Oscar F	Beverly	
1846	Sweat, William W.	Mattapoisett	
1854	†Swift, Alfred	South Dennis	1858
1835	Talbot, Charles P.	Dighton	
1854	Talbot, Israel T.	Boston	
1854	Tanner, Nelson B.	Abington	
1863	Tanner, Nelson B., Jr.	North Abington	
1851	Taylor, Ashmun C.	Shelburne Falls	
1843	Taylor, Israel H.	Amherst	
1849	Taylor, John B.	East Cambridge	
1858	Temple, Cyrus	Heath	
1857	Temple, Theron	Ashburnham	
1852	Thaxter, Duncan McB.	South Boston	
1845	Thayer, David.	Boston	
1830	Thomas, Alexander	Dorchester	
1833	Thomas, Francis	Scituate Harbor	
1806	Thompson, Abraham R.	Charlestown	
1857	Thompson, Austin W.	Northampton	
1840	†Thompson, Daniel	Northampton	1861
1861	Thompson, George T.	Belchertown	
1839	Thompson, John L. S.	Lancaster	
1845	Thomson, George N	Boston	
1858	Thorndike, William	Beverly	
1849	Thorndike, William H.	East Boston	
1850	Tilton, James A.	Newburyport	
1857	Tinker, Martin A.	Schenectady, N. Y.	
1842	Tirrell, N. Quincy	E. Weymouth	
1847	Tobie, Ira W.	Boston	
1837	Toothaker, Samuel A.	Wilmington	
1861	Topliff, Charles C.	Lunenburg	
1830	Torrey, Augustus	Beverly	
1862	Tourtelot, Aug. Valentine.	Boston	
1862	Tower, Chas. C.	So. Weymouth	
1840	Tower, George	Boston	
1859	Towle, Samuel K.	Haverhill	
1849	Townsend, George J.	Natick	
1820	Townsend, Solomon D.	Boston	
1844	Townsend, William E.	Boston	
1857	Tracy, Stephen	Andover	
1864	Treadwell, Josh. Bracket.	Boston	
1863	Tripp, B. H.	Rutland	
1851	Trow, Josiah	Buckland	
1855	Trow, Nathaniel G.	Sunderland	
1854	Trow, William M.	Haydenville	
1843	Tucker, Elisha G.	Boston	
1855	Tucker, Geo. G.	Westfield	
1838	†Tucker, Joshua	Boston	1862
1838	†Tucker, Simeon I.	Stoughton	1863
1859	Tuttle, Chas. M.	Littleton, N. H.	
1859	Tyler, John E.	Somerville	
1855	Tyler, Warren	North Brookfield	

Admitted.	Name.	Residence.	Retired.
1820	†Tyler, William H.	North Adams	1838
1839	†Ufford, Edward G.	W. Springfield	1862
1848	Upham, J. Baxter	Boston	
1861	*Valerj, Gaitano*	Rome, Italy	
1845	Vaille, Henry R.	Springfield	
1846	Wakefield, Horace P.	Reading	
1856	Wakefield, Jonas F.	South Malden	
1863	Walcott, Henry Peck	Cambridge	
1854	Waldock, James	Roxbury	
1855	Walker, Clement A.	South Boston	
1864	Walker, J. C.	Boston	
1864	Walker, J. Edwin	Boston	
1858	Walsh, Peter D.	Boston	
1859	Walsh, Walter M.	Boston	
1862	Ward, Edwin Fletcher	Enfield	
1863	Ward, Geo. A.	New Haven, Ct.	
1863	Ward, Geo. Whitefield	Upton	
1832	Ward, Henry A.	Boston	
1837	Ware, Charles E.	Boston	
1829	†Ware, Jonathan	Milton	1860
1854	Warner, Clinton	Westminster	
1863	Warner, Emerson	Shrewsbury	
1862	Warner, Homer Howard	Springfield	
1860	Warren, Charles	Milford	
1863	Warren, Dewey Kellogg	Boston	
1832	Warren, Edward	Newton L. Falls	
1846	Warren, Geo. A	Hopkinton	
1836	Warren, J. Mason	Boston	
1836	Warren, John W.	Boston	
1820	†Warren, Joseph	Middlefield	1853
1854	Warren, Joseph H.	Boston	
1861	Warren, Orin	West Newbury	
1846	Warren, Royal S.	Waltham	
1833	†Warren, Winslow	Plymouth	1857
1831	Watson, Abraham A.	Boston	
1849	Webber, A. Carter	Cambridge	
1865	Webster, Joseph	New Bedford	
1859	Webster, Jos. R.	Milton	
1837	Weld, C. Minot	Jamaica Plain	
1843	Weld, Moses W.	Boston	
1846	Wellington, J. Lloyd	Swansey	
1839	Wellington, W. W.	Cambridgeport	
1839	Wells, David	Lowell	
1838	West, Benjamin H	Boston	
1849	West, Joseph O.	Princeton	
1843	Weymouth, A. L.	Boston	
1865	Weymouth, Albert B.	Boston	
1837	Wheatland, Henry	Salem	
1863	Wheeler, Charles Aug.	Leominster	
1841	Wheeler, Edward M.	Spencer	
1862	Wheeler, Elbridge G.	N. Becket	
1848	Wheeler, William G.	Chelsea	
1865	Whiston, Edward A.	Deer Island	
1851	Whitcomb, Charles W.	Barre	

Admitted.	Name.	Residence.	Retired.
1863	White, Charles A.....		
1864	White, Charles Henry....	Watertown	
1856	White, James C.....	Boston.....	
1854	White, Jonathan A.....	Baldwinsville	
1845	White, Robert.....	Boston.....	
1860	White, Samuel.....	Springfield	
1833	†Whiting, Augustus.....	Charlestown	1863
1846	Whitmore, George H.	Lowell.....	
1852	Whitney, Allston B.....	West Newton.....	
1835	Whitney, Warren J.....	Boston.....	
1856	Whittemore, H. H. F.....	Marblehead.....	
1865	Whittemore, Jacob P.....	Haverhill.....	
1826	†Whittemore, James M.....	Brighton.....	1860
1834	†Wight, Danforth P.....	Dedham	1863
1865	Wilbur, J. G.	Boston.....	
1845	Wilbur, John R.....	Chicopee Falls.....	
1854	Wilcox, Chauncy A.....	Uxbridge	
1838	Wilde, James.....	Duxbury.....	
1863	Wilder, Burt G.....	Newtonville	
1843	Willard, Francis A.....	Boston.....	
1861	Willard, Josiah N.....	Boston.....	
1864	Willard, Robert.....	Boston.....	
1864	Williams, Alfred G.....	Athol.....	
1854	Williams, Elisha.....	Hinsdale Depot....	
1849	Williams, Henry W.....	Boston.....	
1849	Williams, Jacob L.....	Boston.....	
1822	†Williams, Leonard	Chester	1827
1864	Willis, John Warren.....	Waltham.....	
1861	Willis, Samuel Murray....	Marblehead	
1864	Wilson, Benjamin F.	New Bedford.....	
1852	Wilson, Milo.....	Shelburne Falls....	
1860	Wilter, John.....	Brimfield	
1831	Wing, Benjamin F.	Jamaica Plain.....	
1858	Windship, George B.....	Boston.....	
1863	Winslow, Joseph W.....	East Hampton	
1855	Winsor, Frederic.....	Winchester.....	
1834	†Wood, Alfred.....	Taunton.....	1857
1863	Wood, Alexander M.....	Boston.....	
1856	Wood, Franklin O.....	Petersham.....	
1839	Wood, Theophilus E.....	East Randolph.....	
1860	*Wood, James R.*	New York.....	
1855	Woodbury, Elwell	Medford.....	
1832	Woodward, Ebenezer.....	Quincy	
1855	Woodward, Rufus	Worcester.....	
1833	†Worcester, Jonathan F....	Salem.....	1857
1831	Workman, William.....	Worcester.....	
1861	Wright, Eliphalet	Lee.....	
1821	†Wright, Lucius	Westfield.....	1853
1837	Wyman, Jeffries	Cambridge.....	
1837	Wyman, Morrill.....	Cambridge.....	
1855	Yale, John	Ware.....	
1844	York, Jasper H.....	Dover, N. H.....	
1848	Youngman, David.....	Boston.....	

PROCEEDINGS OF THE COUNCILLORS.

OCTOBER 4, 1865.

THE Stated Meeting of the Councillors was held at their Room in Temple Place, Boston, at 11 o'clock, A.M.

The President, Dr. A. A. GOULD, in the Chair.

The following Councillors were present: —

Bristol South.
John H. Mackie.

Essex North.
Y. G. Hurd,
Martin Root.

Essex South.
E. Hunt.

Middlesex North.
C. A. Savory,
Joel Spalding.

Middlesex East.
A Chapin,
J. M. Harlow,
H. P. Wakefield.

Middlesex South.
H. Cowles,
R. L. Hodgdon.

Worcester.
M. D. Southwick.

Worcester North.
A. Hitchcock.

Norfolk.
E. P. Burgess,
C. C. Holmes,
J. Noyes.

Plymouth.
Asa Millett,
N. B. Tanner.

Suffolk.
J. Ayer,
B. Brown,
C. E. Buckingham,
P. M. Crane,
J. Flint,
J. B. Forsyth,
A. A. Gould,
W. W. Morland,
A. B. Hall,
E. Palmer,
C. D. Homans,
D. H. Storer,
J. Homans,
C. E. Ware,
J. B. S. Jackson,
J. M. Warren,
J. Jeffries,
A. A. Watson,
F. Minot,
H. W. Williams,
W. G. Wheeler.

Dr. H. P. Wakefield, of Reading, from the Committee to consider the expediency of increasing the annual assessment, reported:

That the Committee have considered the subject committed to them, have heard from the Treasurer of the Society a statement of the finances thereof, and would recommend that the whole subject be indefinitely postponed.

The President read a letter from "A Fellow of the Society," offering one hundred dollars ($100) as a Prize for the best dissertation on "Expectant Medicine — the extent to which it is practised at the present day, and the modes in which it is counterfeited."

The award of the Prize to be made in one year from date, by a Committee consisting of the President of the Society, and four others to be nominated by him, with power to fill their own vacancies. The whole Committee subsequently appointed, were:

Dr. A. A. Gould, Dr. H. J. Bigelow,
" S. L. Abbot, " C. Ellis,
Dr. D. W. Cheever.

Should no Dissertation offered be thought worthy of the Prize, the same Committee are authorized to renew the offer for the year following.

Adjourned at 12½, P.M.

C. D. HOMANS,
Corresponding Secretary.

FEBRUARY MEETING, 1866.

The Stated Meeting of the Councillors was held at the Society's Room in Temple Place, Feb. 7th, at 11, A.M.

The President in the Chair.

The following Councillors were present:

Bristol South.
John H. Mackie,
Foster Hooper.

Bristol North.
Thaddeus Phelps,
J. H. Bronson.

Essex South.
Augustus Torrey,
Eben Hunt.

Essex North.
Martin Root.

Worcester North.
M. D. Southwick,
Nelson Carpenter.

Middlesex East.
H. P. Wakefield,
J. C. Dorr.

Middlesex South.
J. T. G. Nichols.

Norfolk.
A. Le B. Munroe,
Edward Jarvis,
Benjamin F. Mann,
Ebenezer Stone,
J. G. S. Hitchcock,
C. C. Holmes.

Plymouth.
Asa Millett.

Suffolk.
John Homans,
P. M. Crane,
W. W. Morland,
A. A. Watson,
George Hayward,
D. H. Storer,
S. L. Abbot,
A. B. Hall,
Jacob Bigelow,
J. Mason Warren,
Geo. C. Shattuck,
F. Minot,
H. I. Bowditch,
C. E. Ware,
John Jeffries,
J. B. S. Jackson,
A. A. Gould.

Dr. Ellis, for the Committee on Membership and Resignations, reported and recommended, that

Dr. P. Garnier, of Paris, Dr. Wucherer, of Bahia,

be made Honorary Members of the Society, and that

Dr. Augustus Torrey, of Beverly,
" J. W. Robbins, of Uxbridge,
" Hervey Orcutt, of Westhampton,
" William Bushnell, of Boston,
" Alonzo Chapin, of Winchester,

be made Retired Members, they having attained the age of sixty years, and paid their dues.

The report was accepted, and its recommendations adopted.

Adjourned at 12, M.

R. M. HODGES,
Recording Secretary.

ANNUAL MEETING OF COUNCILLORS.

The Annual Meeting of the Councillors was held in their Room in Temple Place, May 29th, 1866, at 7.30, P. M.

The President, Dr. A. A. Gould, in the Chair.

Councillors present:

Barnstable.
J. B. Everett.

Berkshire.
N. S. Babbitt,
H. L. Sabine.

Bristol North.
Thaddeus Phelps,
H. N. Jones,
O. C. Turner,
W. M. Orcutt,
Asa Millett.

Bristol South.
F. Hooper,
G. Atwood,
W. W. Comstock,
M. D. Southwick.

Essex North.
M. Root,
E. Cross.

Essex South.
E. F. Hunt,
Augustus Torrey.

Middlesex North.
C. A. Savory.

Middlesex East.
A. Chapin.

Middlesex South.
J. T. G. Nichols,
J. C. Dorr,
J. F. Wakefield,
J. C. Harris.

Norfolk.
B. E. Cotting,
C. C. Holmes,
S. Salisbury,
A. Le B. Munroe,
E. Jarvis,
J. G. S. Hitchcock,
Ira Russell,
J. F. Richards.

Suffolk.
B. Brown,
H. I. Bowditch,
John Jeffries,
C. D. Homans,
F. Minot,
C. E. Ware,
W. W. Morland,
G. H. Gay,
E. Palmer,
D. H. Storer,
J. M. Warren,
J. Homans,
P. M. Crane,
W. G. Wheeler,
J. B. Forsyth,
S. Morrill,
J. Flint,
J. B. S. Jackson,
A. B. Hall,
G. Hayward,
J. Ayer,
A. A. Gould,
G. C. Shattuck,
J. B. Upham,
H. W. Williams,
S. Cabot,
A. A. Watson.

Worcester.
Jefferson Pratt,
T. H. Gage,
F. Leland,
Oramel Martin,
J. Sargent,
J. Porter.

Worcester North.
J. R. Boutelle,
C. C. Field.

The Secretary read the records of the last meeting, and of the last Annual Meeting of the Council, and also the names of ninety-two new, and nineteen deceased members.

The Reports of the Corresponding Secretary, Treasurer and Auditing Committee were read and approved.

Dr. Hodges declined re-election as Recording Secretary.

The President appointed a Nominating Committee of one Councillor from each district.

Pending the Report of this Committee, Dr. Cotting of Norfolk moved, and it was voted, that the following Rule be added to the Rules and Regulations of the Councillors:

"10. The Officers of the Society shall retain their places until the close of the Annual Meeting of the Society; and the last official act of a retiring President, previous to the final adjournment of the Society, shall be the yielding of his chair to his successor elect, if the latter be present."

The Reports of the Librarian, the Committee on Membership and Resignations, on Publications and on Finance, were read and accepted.

The President, as Chairman of the Committee to whom were referred the Dissertations presented for a Prize of $100, offered by a "Retired Member," reported that no Dissertations had been handed in. In accordance with the terms of the offer, the same subject is again proposed, and the same Committee held over for another year.

A communication from the Censors of Suffolk, referring to the admission of members from Massachusetts Colleges, without examination, was referred to Drs. Williams and Ellis of Boston, and Dr. Wheeler of Chelsea.

Dr. Jarvis, of Dorchester, from the Nominating Committee, read the following list of Nominations:

For *President*, Dr. HENRY C. PERKINS, of Newburyport.
" *Vice President*, Dr. FOSTER HOOPER, of Fall River.
" *Corresponding Secretary*, Dr. C. D. HOMANS, of Boston.
" *Recording Secretary*, Dr. D. W. CHEEVER, of Boston.
" *Treasurer*, Dr. F. MINOT, of Boston.
" *Orator*, Dr. H. B. WAKEFIELD, of Reading.
" *Librarian*, Dr. J. C. WHITE, of Boston.
" *Anniversary Chairman*, Dr. H. W. WILLIAMS, of Boston.

They were unanimously elected.

It was voted that the next Annual Meeting be held in the City of Boston.

Dr. J. Mason Warren, of Boston, moved, and it was voted, that at the next Annual Meeting the Society meet on the first Wednesday in June, instead of the last Wednesday in May.

Dr. Shattuck, of Boston, moved that the Annual Assessment be raised to five (5) dollars.

On motion of Dr. Minot, the increased assessment was voted to be levied on and after 1867.

Dr. Warren, of Boston, moved the following vote, which was unanimously passed:

"That the thanks of the Councillors be presented to our retiring President, Dr. A. A. GOULD, for the dignified, acceptable and agreeable manner in which he has conducted our meetings for the last two years, adding to the debt we already owe him for his long and laborious devotion to our interests."

The President responded to this vote of thanks.

On motion of Dr. Minot, of Boston, the fee for the engraved Diploma of the Society was raised to five (5) dollars.

Dr. Cotting, of Roxbury, presented a volume as the gift of Dr. P. Garnier, of Paris, Honorary Member of the Society; and the Corresponding Secretary was directed to acknowledge its receipt.

The President appointed the following standing Committees:

On Publications.

Drs. G. C. Shattuck, F. Minot, B. E. Cotting.

On Finance.

Drs. J. Homans, S. Durkee, P. M. Crane.

On Membership and Resignations.

Drs. J. Ayer, F. Minot, C. Ellis.

Auditing Committee.

Drs. E. Palmer, C. E. Ware.

Committee of Arrangements.

Dr. C. D. Homans, R. M. Hodges, J. N. Borland,
A. P. Hooker, A. Coolidge.

Committee on $100 *Prize.*

Dr. H. C. Perkins, President, *ex officio*,
Drs. H. J. Bigelow, S. L. Abbot, C. Ellis, D. W. Cheever.

Drs. Calvin P. Fiske of Fiskedale,
" Edwin Adams of Boston,
" E. S. Hawkes of North Adams,

having paid their dues, and reached the age of retirement were made Retired Members of the Society.

At 10 o'clock the Council dissolved.

DAVID W. CHEEVER,
Recording Secretary.

PROCEEDINGS OF THE SOCIETY.

ANNUAL MEETING.

First Day's Meeting.

In accordance with its pre-arranged plan, the Society met at 12, M., May 29, 1866, in the Hall of the Lowell Institute.

The President, Dr. A. A. Gould, in the Chair.

Dr. John Homans, Chairman of the Committee charged with arranging the plan for a two-day's meeting, made an address stating the circumstances connected with the inception of the proposed change, and the arrangements which had been made for carrying it out.

Dr. J. Mason Warren, also, made some remarks as to the method pursued in selecting readers of papers for the first day's meeting.

The following papers were then read, in order:

Dr. J. C. White, . .	On Parasitic Cutaneous Diseases.
" H. K. Oliver . . .	Physiology of the Larynx.
" Morrill Wyman . .	Autumnal Catarrh.
" R. M. Hodges . .	Dislocation of the Shoulder Joint.
" Walter Channing . .	Asiatic Cholera.
" H. J. Bigelow . .	Anæsthesia by Freezing.
" David W. Cheever .	Leucocythæmic Tumors.

At 2, P.M., the Society adjourned until 4, P.M.

Afternoon Session.

Dr. J. Mason Warren read a paper on Cystic Tumors of the Jaw.

Dr. H. W. Williams, on certain Reparative Measures in Diseases of the Eye.

Dr. H. R. Storer exhibited his "Clamp-Shield," and read a paper setting forth its merits.

On motion of Dr. Sabine, of Berkshire, the thanks of the Society were voted to the gentlemen who had read papers during the day.

The following named Delegates were presented to, and addressed the Society:

Dr. Hiram Corliss,
" E. S. F. Arnold,
" Samuel Hart,
" Joseph Bates,
} *from the N. Y. State Med. Society.*

" Henry S. Downs,
" Levi G. Hill,
} *from the N. H. Medical Society.*

On motion of Dr. Wheeler of Suffolk, Drs. C. E. Ware, W. G. Wheeler, and O. Martin of Worcester, were appointed a Committee to receive delegates and strangers, and to present them to the Society.

On motion of Dr. Sabine, the Society adjourned at 5.45, P.M.

R. M. HODGES,
Recording Secretary.

Second Day's Meeting.

May 30, 1866, the Annual Meeting of the Society was held at 10, A.M., in the Hall of the Lowell Institute, Boston.

Dr. A. A. Gould, President, in the Chair.

The Secretary read the Records of the last Annual Meeting, and laid before the Society the Records of the Councillors for the past year.

He also presented the names of New and Deceased Members.

Fellows Admitted since May 31, 1865.

F. S. Abbott	Pittsfield.
James Foster Alleyne Adams	Boston.
Elisha W. Aiken	"
George Otis Allen	"
Charles Bliss	Springfield.
Theodore F. Breck	"
James Bartlett Brewster	Plymouth.
Franklin W. Brigham	Shrewsbury.
William Andrews Browne	Boston.
Charles Abraham Burnham	"
W. H. Campbell	Roxbury.
John E. Cobb	Taunton.
William Francis Coleman	S. Boston.
Daniel M. Cool	Conneaut, O.
John O'Dwyer Creaghe	Boston.
Stephen Cushing	"
George Osgood Dalton	Woburn.
Samuel Lane Dalton	Boston.
A. H. Daniels	Amherst.
A. Sumner Deane	Fall River.
Barna Ladd Delano	Boston.
James E. DeWolfe	Georgetown.
James N. Dickson	Sheffield.
John A. Douglass	Amesbury.
J. R. Draper	Dedham.
Samuel Holmes Durgin	Boston.
William W. Eaton	S. Reading.
Isaac Fairchild	Fair Haven.
George W. Fay	E. Weymouth.
D. B. N. Fish	N. Amherst.
Lorenzo S. Fox	Lowell.
George E. Francis	Worcester.
Louis Edward Franks	Boston.
Jesse F. Frisbie	Woburn.
Harlow Gamwell	Huntington.
William Warren Gardner	Springfield.
J. S. Gilman	Lowell.

J. A. Goddard	Huntington.
Benjamin F. Hastings	E. Abington.
George Henry Hope	Seaforth, Eng.
Charles Y. Hubbard	Taunton.
William Henry Hull	Essex.
Ralph C. Huse, jr.	Georgetown.
Charles Edward Inches	Boston.
Richard Maybery Ingalls	S. Boston.
George Howard Jones	Boston.
E. M. Johnson	Williamsburg.
Joseph Taber Johnson	Washington, D.C.
Otis H. Johnson	Haverhill.
Samuel Moore Logan	E. Boston.
H. S. Lucas	Chester.
Aloysius Elexcis Macdonald	Boston.
Charles McAllister	Stockbridge.
James McDonald	Boston.
William Lewis McDonald	"
George Merrick Nichols	"
William Martyn Ogden	"
John E. Parsons	Charlestown.
C. H. Perry	Webster.
Edward Liston Pillsbury	Fitchburg.
George Edwin Pinkham	Lowell.
F. C. Plunket	"
Albert Augustus Porter	Wrentham.
Charles Burnham Porter	
George Herman Powers	Boston.
Silas D. Presbrey	Taunton.
George A. Priest	Manchester.
A. B. Rice	Hatfield.
A. R. Rice	Springfield.
Charles H. Rice	Fitchburg.
John H. Richardson	Medfield.
Francis Codman Ropes	Boston.
Joseph W. Rockwell	Southwick.
William W. Sawin	Chicopee Falls.
Benjamin A. Sawyer	Haverhill.
Edward Sawyer	Bridgewater.
George W. Snow	Newburyport.
Ebenezer F. Spaulding	Georgetown.
H. H. Sprout	E. Taunton.
A. L. Stickney	Sutton.
Frederick Newton Sturgess	Kempt, N. S.
George Grosvenor Tarbell	Lincoln.
O. C. Turner	Attleboro.'
Charles E. Vaughan	Cambridge.

Oliver Fairfield Wadsworth	Boston.
Edwin F. Ward	E. Hampton.
John Collins Warren	Boston.
James H. Waterman	Westfield.
Samuel G. Webber	Boston.
Francis Minot Weld	Jamaica Plain.
Edward Wigglesworth	Boston.
Abraham M. Wilder	Lawrence, Kansas
James Long Williams	Boston.
Albert Wood	Worcester.
George F. Wood	N. Carver.

Total, 95.

List of Deceased Fellows.

Admitted.	Name.	Residence.	Date of Decease.		Age.
1861	Barrett, Edward B.	Northampton	Nov. 24,	1865	29
1833	Bartlett, Lyman	New Bedford	June 11,	1865	58
1839	Bigelow, Henry	Newton Corner	Jan. 21,	1866	48
1851	Bowker, Alonzo M.	Savoy		1865	
1849	Caleb, Jonathan S.	San Francisco	Feb. 21,	1866	59
1835	Campbell, Patrick P.	Chelmsford	Nov. 18,	1865	60
1839	Fiske, Robert T. P.	Hingham	May 8,	1866	66
1841	Foster, Charles F.	Cambridge	Sept. 24,	1865	47
1832	Gould, Abraham	Lynn	Feb. 27,	1866	69
1811	Green, John	Worcester	Oct. 17,	1865	81
1839	Huntington, Elisha	Lowell	Dec. 13,	1865	69
1845	Moody, George	Georgetown	March 4,	1866	66
1831	Moriarty, John M.	East Boston	Oct. 20,	1865	55
1831	Peck, Addison S.	California	April 5,	1866	55
1861	Rice, William E.	South Boston	July 19,	1865	28
1851	Smith, Benjamin F.	Amherst	Oct. 10,	1865	48
1806	Thompson, Abraham R.	Charlestown	May 11,	1866	85
1833	Windship, Charles M.	Roxbury	July 19,	1865	56

The Treasurer presented his Annual Report.

The President acknowledged the receipt of a volume of Medical Transactions from the County of King's, N. Y. Also, two vols. from Dr. Corliss, a Delegate from N. Y., for which thanks were returned.

Dr. Luther Parks, jr., of Boston, Chairman of the Committee to whom was referred the subject of *Cerebro-spinal Meningitis*, read an abstract of a lengthy and valuable report on that subject.

Dr. E. Cutter, of Woburn, exhibited a Model of a Fracture Bed, and, also, of an Atomizer.

Dr. Chapin, of Winchester, read a paper on the Medicinal Qualities of the Common Mullein.

Dr. H. R. Storer read a paper on the Abetment of Criminal Abortion by Medical Men.

At 1 o'clock, the Annual Oration was delivered by Dr. George C. Shattuck, on Professional Relations.

The thanks of the Society were voted for this able discourse. Thanks were also returned to the retiring President, Dr. A. A. Gould, for his long and faithful services, and to the Trustees of the Lowell Institute for the use of the Hall.

Dr. Gould introduced the President elect, Dr. Henry C. Perkins, of Newburyport, who made a few appropriate remarks.

At 2 o'clock the Society adjourned to the Music Hall, where a sumptuous dinner was served; and where, under the admirable management of the Committee of Arrangements, the Members spent several hours in listening to music, speeches, toasts, etc.

At 6, P.M., the meeting dissolved.

DAVID W. CHEEVER,
Recording Secretary.

TREASURER'S REPORT.

THE Treasurer begs to report that the amount of money received by him for the Society, during the past year, was six thousand and ninety-eight dollars and ninety-seven cents ($6,098 97); and the amount expended was four thousand two hundred and fifty-two dollars and twenty-one cents ($4,252 21), leaving a balance in his hands of one thousand eight hundred and forty-six dollars and seventy-six cents ($1,846 76).

principal items of receipt and expenditure will be found analysis account, hereto annexed.

lance on hand includes $879 34 belonging to the ck Fund, which can only be appropriated to certain purposes; and $100 given for a Prize — leaving available for the general expenses of the Society.

ie Debt of the Society amounts to one thousand dollars, which we are now paying interest at the rate of $7\frac{3}{10}$ per ent. per annum.

The property of the Society is as follows:

Permanent Fund	$11,253 30
Shattuck Fund	9,166 87
Phillips Fund	10,000 00
	$30,420 17

subject of increasing the amount of the annual assess- was considered by the Councillors at the October Meet- In view of the omission of the Dinner at the last An- Meeting, it was decided to make no alteration at the . The Treasurer would respectfully urge upon the So- ciety the necessity of increasing the assessment after the present year, in consequence of the continued increase in the rate of our expenses, and in order that many valuable papers, read before the Society, may be printed in our annual volume. The reversions are not sufficient to pay the expenses of the District Societies, one of which (Norfolk) has voted unanimously to recommend to the Councillors that the assessment be raised to the amount of *Five Dollars*.

The Treasurer would, also, respectfully recommend that the Fee for the Society's Diploma be raised to *Five Dollars*.

Respectfully submitted.

FRANCIS MINOT, *Treasurer*.

Boston, *May* 29, 1866.

Dr. Francis Minot, Treasurer, in Account with Massachusetts Medical Society. Cr.

Balance from old account,			$528 33
Sundry Assessments,			468 00
From Districts.	Barnstable,	$51 00	
	Berkshire,	66 00	
	Bristol North,	27 00	
	Bristol South,	66 00	
	Essex North,	123 00	
	Essex South,	15 00	
	Franklin,	20 00	
	Hampden,	45 00	
	Hampshire,	102 00	
	Middlesex North,	90 00	
	Middlesex East,	105 00	
	Middlesex South,	288 00	
	Norfolk,	183 00	
	Suffolk,	591 00	
	Worcester,	162 00	
	Worcester North,	36 00	1970 00
Interest — General Fund,		$928 37	
Shattuck Fund,		756 27	
Phillips Fund,		698 75	
			2383 39
Rents,			606 20
Diplomas,			18 00
Presented anonymously, for Prize,			100 00
Sundries,			25 05
			$6098 97

Refunded to Districts.	Barnstable,	$13 50	
	Berkshire,	22 05	
	Bristol North,	11 85	
	Bristol South,	19 80	
	Essex North,	40 15	
	Essex South,	4 50	
	Hampden,	8 50	
	Hampshire,	36 60	
	Middlesex North,	30 00	
	Middlesex East,	32 35	
	Middlesex South,	149 70	
	Norfolk,	84 90	
	Suffolk,	156 00	
	Worcester,	56 10	
	Worcester North,	12 95	678 95
Publications,			2170 57
Rents, Taxes, Care of Room, Gas and Water,			839 09
Interest,			106 50
Printing Diplomas,			26 00
Treasurer's Salary,			300 00
Collecting,			20 88
Balance of Note to A. A. Gould,			77 80
Expenses of Annual Meeting,			5 50
Sundries			24 92
Balance on hand, May 26, 1866,			1846 76
			6098 97

[E. E.]

FRANCIS MINOT, Treasurer.

Officers of the Massachusetts Medical Society.

1866 — 67.

Chosen May 29, 1866.

HENRY C. PERKINS, . . Newburyport, . President.
FOSTER HOOPER, ... Fall River, . . . Vice-President.
CHARLES D. HOMANS, . Boston, ... Cor. Secretary.
DAVID W. CHEEVER, . . Boston, ... Rec. Secretary.
JAMES C. WHITE, . . . Boston, . . . Librarian.
FRANCIS MINOT, ... Boston, ... Treasurer.

Vice-Presidents (Ex-Officiis.)

[Arranged according to Seniority.]

Paul L. Nichols.
Anson Hooker.
Benjamin Cox, Jr.
Henry I. Bowditch.
Benjamin E. Cotting.
David Parker.
Francis D. Bartlett.
J. W. D. Osgood.
Jonathan Brown.
Oliver E. Brewster.
Moses D. Southwick.
David P. Smith.
Ephraim Cutter.
Austin W. Thompson.
George W. Garland.
George N. Munsell.
Henry B. Hubbard.

Councillors.

Barnstable. — Drs. Franklin Dodge, Harwich; James B. Everett, Falmouth; Chauncy M. Hulbert, S. Dennis; John M. Smith, Barnstable.

BERKSHIRE. — Drs. Nathan S. Babbitt, North Adams; Henry H. Childs, Pittsfield; H. W. Browne, Richmond; Henry L. Sabin, Williamstown.

BRISTOL NORTH. — Drs. William G. Allen, Mansfield; Joseph B. Fobes, Taunton; Thaddeus Phelps, O. C. Turner, Attleboro'.

BRISTOL SOUTH. — Drs. Edward P. Abbé, New Bedford; George Atwood, Fairhaven; William W. Comstock, Middleborough; William A. Gordon, Charles D. Stickney, New Bedford.

ESSEX NORTH. — Drs. Enoch Cross, Newburyport; John Crowell, Haverhill; David Dana, Lawrence; Kendall Flint, Haverhill; Martin Root, Byfield.

ESSEX SOUTH. — Drs. David Choate, Benjamin Cox, Jr., Salem; Benjamin Haskell, Rockport; Ebenezer Hunt, Danvers; Edward B. Peirson, Salem; Augustus Torrey, Beverly.

FRANKLIN. — Drs. Edward Barton, South Orange; Stephen Bates, Charlemont; Elijah Stratton, Northfield; Nathaniel G. Trow, Sunderland.

HAMPDEN. — Drs. Noyes Barstow, Chicopee; Cyrus Bell, Feeding Hills; William G. Breck, Springfield; William Holbrook, Palmer Depot; Horatio G. Stickney, Springfield.

HAMPSHIRE. — Edward E. Denniston, Wm. H. Prince, Northampton; William M. Trow, Haydenville.

MIDDLESEX EAST. — Drs. A. Chapin, Winchester; Ephraim Cutter, Woburn (*ex officio*); J. M. Harlow, Woburn; Joseph D. Mansfield, South Reading.

MIDDLESEX NORTH. — Drs. John C. Bartlett, North Chelmsford; Walter Burnham, Lowell; Austin Marsh, Carlisle; Charles A. Savory, Joel Spalding, Lowell.

MIDDLESEX SOUTH. — Drs. Edward F. Barnes, Marlboro'; James C. Dorr, Medford; Jonas C. Harris, West Cambridge; Enos Hoyt, Framingham; Theodore Kittredge, Waltham; Abel C. Livermore, Stow; Luther B. Morse, Watertown; John T. G. Nichols, Cambridge; Jefferson Pratt, Hopkinton; Ira Russell, Natick; Jonas F. Wakefield, South Malden.

NORFOLK. — Drs. Ira Allen, Roxbury; Eben P. Burgess, Dedham; Benjamin E. Cotting, Roxbury; Joseph G. S. Hitchcock, Foxboro'; Christopher C. Holmes, Milton; Edward Jarvis, Dorchester; Alexander LeB. Munroe, Medway; Stephen Salisbury, Brookline; Ebenezer Stone, Walpole.

PLYMOUTH. — Drs. Henry N. Jones, Kingston; Asa Millett, Bridgewater; James F. Richards, Campello; James Wilde, Duxbury.

SUFFOLK. — Drs. S. L. Abbot, J. Ayer, J. Bigelow, H. J. Bigelow, H. I. Bowditch, B. Brown, C. E. Buckingham, S. Cabot, H. G. Clark, Boston; P. M. Crane, East Boston; C. Ellis, J. Flint, Boston; J. B. Forsyth, Chelsea; G. H. Gay, A. A. Gould, A. B. Hall, G. Hayward, C. D. Homans, *Corresponding Secretary*, J. Homans, J. B. S. Jackson, J. Jeffries, F. Minot, *Treasurer*, W. W. Morland, S. Morrill, E. Palmer, C. G. Putnam, G. C. Shattuck, D. H. Storer, J. B. Upham, C. E. Ware, J. M. Warren, A. A. Watson, H. W. Williams, Boston; W. G. Wheeler, Chelsea.

WORCESTER. — Drs. Thomas H. Gage, Worcester; Francis Leland, Milford; Oramel Martin, Worcester; Joseph Sargent, Worcester; M. D. Southwick, Blackstone; Joseph O. West, Princeton; Almon M. Orcutt, Hardwick; Joshua Porter, North Brookfield.

WORCESTER NORTH. — Drs. Thomas R. Boutelle, Fitchburg; C. C. Field, Leominster; Alfred Hitchcock, Fitchburg; Jas. O. Parker, Shirley.

Censors.

BARNSTABLE. — Drs. Jonathan Leonard, Sandwich; G. N. Munsell, West Harwich; Geo. Shove, Yarmouth Port; Marshall E. Simmons, Chatham; Thomas N. Stone, Wellfleet.

BERKSHIRE. — Drs. Frank A. Cady, Pittsfield; C. C. Holcomb, Lee; H. M. Holmes, South Adams; Andrew M. Smith, Williamstown.

BRISTOL NORTH. — Drs. John R. Bronson, Attleboro'; Joseph Murphy, Silas D. Presbrey, Taunton.

BRISTOL SOUTH. — Drs. Isaac Fairchild, Fairhaven; Joseph Haskell, Rochester; Frederick H. Hooper, C. L. Swasey, Benjamin F. Wilson, New Bedford.

ESSEX NORTH. — Drs. Francis A. How, Newburyport; Oliver S. Lovejoy, Haverhill; George W. Sargent, Lawrence; Morris Spofford, Groveland; Orin Warren, West Newbury.

ESSEX SOUTH. — Drs. James M. Nye, Lynn; H. Osgood Stone, Salem; Henry F. Whittemore, Marblehead.

FRANKLIN. — Drs. Eben. A. Deane, Montague; Charles M. Duncan, Shelburne; David Rice, Leverett.

HAMPDEN. — Drs. Alfred Lambert, Alexander S. M'Lean, Springfield; Thomas L. Chapman, Longmeadow.

HAMPSHIRE. — Oscar C. DeWolf, James Dunlap, Northampton; Joseph W. Winslow, East Hampton.

MIDDLESEX EAST. — Drs. Samuel W. Abbott, Woburn, *ex officio*; A. Chapin, Frederick Winsor, Winchester.

MIDDLESEX NORTH. — Drs. John C. Bartlett, Chelmsford; Nathaniel B. Edwards, North Chelmsford; Jeremiah P. Jewett, Charles A. Savory, Lowell.

MIDDLESEX SOUTH. — Drs. Henry Cowles, Saxonsville ; Harlin H. Pillsbury, Medford ; Morrill Wyman, Cambridge.

NORFOLK. — Drs. George Faulkner, Jamaica Plain ; William C. B. Fifield, Dorchester ; James S. Greene, Milton ; D. Wayland Jones, Medfield ; Joel Seaverns, Harrison Square ; Chas. C. Tower, South Weymouth.

PLYMOUTH.—Drs. Josiah S. Hammond, Plympton ; Benjamin Hubbard, Plymouth ; James F. Richards, North Bridgewater.

SUFFOLK. — Drs. D. W. Cheever, H. F. Damon, B. J. Jeffries, J. P. Reynolds, J. C. White, Boston.

WORCESTER. — Drs. Rowse R. Clark, Whitinsville ; Henry Clarke, Worcester ; Daniel S. Fiske, East Brookfield ; Thomas H. Gage, Worcester ; Benjamin H. Tripp, Rutland.

WORCESTER NORTH. — Drs. James Coolidge, Athol Depot ; Joshua B. Gould, Templeton ; George Jewett, Fitchburg ; Asahel A. Plympton, Shirley Village ; Clinton Warner, Westminster.

Commissioners of Trials.

BARNSTABLE	Franklin Dodge . .	Harwich.
BERKSHIRE	Henry Pratt	Lanesborough.
BRISTOL NORTH . . .	William G. Allen .	Mansfield.
BRISTOL SOUTH . . .	John Spare	New Bedford.
ESSEX NORTH	Jeremiah Spofford .	Groveland.
ESSEX SOUTH	George Choate . .	Salem
FRANKLIN	David Bradford . .	Montague.
HAMPDEN	Calvin C. Chaffee .	Springfield.
HAMPSHIRE	Israel H. Taylor . .	Amherst.
MIDDLESEX EAST . .	Horace P. Wakefield	Reading.
MIDDLESEX NORTH .	John O. Greene . .	Lowell.

Middlesex South	Wm. W. Wellington	Cambridge.
Norfolk	Ebenezer Alden	Randolph.
Plymouth	Josiah S. Hammond	Plympton.
Suffolk	Silas Durkee,	Boston.
Worcester		
Worcester North	James O. Parker	Shirley.

Officers of the District Medical Societies.

Barnstable. — Dr. James B. Everett, Falmouth, *President*; Dr. George N. Munsell, Harwich, *Vice-President*; Dr. Marshall E. Simmons, Chatham, *Secretary*; Dr. Samuel H. Gould, Brewster, *Treasurer and Librarian.*

Berkshire. — Dr. Oliver E. Brewster, Pittsfield, *President*; Dr. Nathan S. Babbitt, North Adams, *Vice-President*; Dr. Wm. Warren Greene, Pittsfield, *Secretary*; Dr. Abner M. Smith, Pittsfield, *Treasurer.*

Bristol North. — Dr. Henry B. Hubbard, Taunton, *President*; Dr. John B. Chase, Taunton, *Vice-President*; Dr. Nomus Paige, Taunton, *Secretary and Treasurer*; Dr. Ira Sampson, Taunton, *Librarian.*

Bristol South. — Dr. F. D. Bartlett, South Dartmouth, *President*; Dr. P. F. Doggett, Wareham, *Vice-President*; Dr. Frederick H. Hooper, New Bedford, *Secretary, Treasurer and Librarian.*

Essex North. Dr. George W. Garland, Lawrence, *President*; Dr. Henry C. Perkins, Newburyport, *Vice-President*; Dr. Martin Root, Byfield, *Secretary and Treasurer*; Dr. Kendall Flint, Haverhill, *Librarian.*

ESSEX SOUTH. — Dr. Benjamin Cox, Jr., Salem, *President;* Dr. George A. Perkins, Salem, *Vice-President;* Dr. David Choate, Salem, *Secretary;* Dr. William Mack, Salem, *Treasurer;* Dr. William Neilson, Salem, *Librarian.*

FRANKLIN. — Dr. J. W. D. Osgood, Greenfield, *President;* Dr. Josiah Trow, Buckland, *Vice-President;* Dr. William Dwight, Bernardston, *Secretary, Treasurer and Librarian.*

HAMPDEN. — Dr. David P. Smith, Springfield, *President;* Dr. George G. Tucker, Westfield, *Vice-President;* Dr. Albert R. Rice, Springfield, *Secretary, Treasurer and Librarian.*

HAMPSHIRE. — Dr. Austin W. Thompson, Northampton, *President;* Dr. David W. Miner, Ware, *Vice-President;* Dr. Francis C. Greene, East Hampton, *Secretary;* Dr. James Dunlap, Northampton, *Treasurer.*

MIDDLESEX EAST. — Dr. Ephraim Cutter, Woburn, *President;* Dr. S. A. Toothaker, Wilmington, *Vice-President;* Dr. Sam'l W. Abbott, Woburn, *Secretary;* Dr. Alonzo Chapin, Winchester, *Treasurer and Librarian.*

MIDDLESEX NORTH. — Dr. Jonathan Brown, Tewksbury, *President;* Dr. Jeremiah P. Jewett, Lowell, *Vice-President;* Dr. James G. Bradt, Lowell, *Secretary;* Dr. Nathaniel B. Edwards, North Chelmsford, *Treasurer;* Dr. Joel Spalding, Lowell, *Librarian.*

MIDDLESEX SOUTH. — Dr. Anson Hooker, East Cambridge, *President;* Dr. Samuel Richardson, Watertown, *Vice-President;* Dr. John T. G. Nichols, Cambridge, *Secretary;* Dr. B. F. D. Adams, Waltham, *Treasurer.*

NORFOLK. — Dr. Benjamin E. Cotting, Roxbury, *President;* Dr. Jonathan Ware, Milton, *Vice-President;* Dr. Edward Jarvis, Dorchester, *Secretary;* Dr. Ebenezer P. Burgess, Dedham, *Treasurer;* Dr. David S. Fogg, South Dedham, *Librarian.*

PLYMOUTH. — Dr. Paul L. Nichols, Kingston, *President*; Dr. Winslow Warren, Plymouth, *Vice-President*; Dr. Henry N. Jones, Kingston, *Secretary and Treasurer*; Dr. Francis Collamore, Pembroke, *Librarian*.

SUFFOLK. — Dr. Henry I. Bowditch, Boston, *President*; Dr. James Ayer, Boston, *Vice-President*; Dr. Charles W. Swan, Boston, *Secretary*; Dr. John N. Borland, Boston, *Treasurer*; Dr. Calvin Ellis, Boston, *Librarian*.

WORCESTER. — Dr. Moses D. Southwick, Blackstone, *President*; Dr. Rufus Woodward, Worcester, *Vice-President and Librarian*; Dr. George E. Francis, Worcester, *Secretary*; Dr. Thomas H. Gage, Worcester, *Treasurer*.

WORCESTER NORTH. — Dr. David Parker, Gardner, *President*; Dr. Alfred Hitchcock, Fitchburg, *Vice-President*; Dr. George D. Colony, Fitchburg, *Secretary and Librarian*; Dr. Thomas R. Boutelle, Fitchburg, *Treasurer*.

CATALOGUE OF FELLOWS OF THE MASSACHUSETTS MEDICAL SOCIETY.

☞ *The list is intended to contain the Acting and Retired Members now residing in the State, and such as have retained membership after removal.*

Admitted.	Name.	Residence.	Retired.
1854	Abbé, Edward P.....	New Bedford.....	
1855	Abbot, Ezra.....	Canton.....	
1851	Abbot, Oscar D.....	Rockport.....	
1841	Abbot, Samuel L.....	Boston.....	
1840	†Abbott, Jehiel.....	Westfield.....	1859
1862	Abbott, Samuel Warren...	Woburn.....	
1838	Adams, Abel B.....	Waltham.....	
1865	Adams, B. F. D.....	Waltham.....	
1828	†Adams, Edwin.....	Boston.....	1865
1866	Adams, Jas. Foster Alleyne	Boston.....	
1851	Adams, Lucius S.....	Stockbridge.....	
1847	Adams, Zabdiel B.....	Roxbury.....	
1847	Adams, Nathan.....	Springfield.....	
1865	Aiken, Elisha W.....	Boston.....	
1847	Ainsworth, F. S.....	Boston.....	
1818	Alden, Ebenezer.....	Randolph.....	
1829	Alden, Samuel.....	Bridgewater.....	
1835	Alexander, Andrew.....	Dorchester.....	
1860	Allen, A. N.....	Pittsfield.....	
1864	Allen, Charles Gilbert....	Barre.....	
1843	Allen, Charles H.....	Cambridgeport.....	
1866	Allen, George Otis.....	Boston.....	
1852	Allen, Ira.....	Roxbury.....	
1859	Allen, Justin.....	Topsfield.....	
1842	Allen, Nathan.....	Lowell.....	
1862	Allen, William George....	Mansfield.....	
1830	*Almon, William*.....	Halifax, N. S.....	
1860	Ames, Joseph S.....	Holden.....	
1864	Anderson, Alexander.....	River John, N. S...	
1822	†Andrews, John.....	Boylston.....	1855
1860	Andrews, Robert.....	Orange.....	
1833	Appleton, John.....	Cambridge.....	
1864	Arnold, George J.....	Roxbury.....	
1850	Arnold, J. S.....	Dedham.....	
1861	*Arnold, S. A*.....	Providence, R. I...	
1837	Atwood, George.....	Fairhaven.....	
1841	Ayer, James.....	Boston.....	

Admitted.	Name.	Residence.	Retired.
1837	Babbitt, Nathan S.	North Adams.	
1864	Bachelder, John.	Marion.	
1846	Bachelder, Samuel F.	South Boston.	
1842	Bacon, Amasa D.	Sharon.	
1841	Bacon, John.	Boston.	
1835	Ball, Stephen.	Boston.	
1837	Bancroft, Amos B.	Charlestown.	
1864	Bancroft, Kirk A.	Duxbury.	
1854	†Barker, Bowen.	South Hanson.	1860
1864	Barnes, Charles W.	Grafton.	
1860	Barnes, Edward F.	Marlborough.	
1855	Barnes, John.	Milford.	
1828	†Barrett, Benjamin.	Northampton.	1856
1846	Barrett, Henry A.	Concord.	
1852	Barrett, William M.	Ashland.	
1863	Barrows, Nathan.	Sandwich.	
1861	Barstow, Noyes.	Chicopee.	
1852	Bartlett, Cyrus K.	Northampton.	
1839	†Bartlett, Francis D.	South Dartmouth.	1862
1831	Bartlett, Henry.	Roxbury.	
1833	Bartlett, John C.	Chelmsford.	
1846	Bartlett, Joseph E.	Boston.	
1823	Bartlett, Josiah.	Concord.	
1841	Barton, Edward.	South Orange.	
1842	*Barton, John Rhea.*	Philadelphia.	
1864	Bass, William.	Lowell.	
1861	Bates, Joseph N.	Worcester.	
1852	†Bates, Stephen.	Charlemont.	1864
1842	Bell, Artemas.	Southampton.	
1846	Bell, Cyrus.	West Springfield.	
1853	*Bell, Theodore S.*	Louisville, Ky.	
1839	Bemis, Charles V.	Medford.	
1834	Bemis, Jonathan W.	Charlestown.	
1857	Bemis, Merrick.	Worcester.	
1847	Bennett, A. W.	Uxbridge.	
1836	Bethune, George A.	Boston.	
1853	Bickford, Hezekiah C.	Charlestown.	
1847	Bigelow, George F.	Boston.	
1844	Bigelow, Henry J.	Boston.	
1813	Bigelow, Jacob.	Boston.	
1864	Billings, Lucius F.	Barre.	
1861	Blake, John G.	Boston.	
1852	Blanchard, Albert H.	Sherborn.	
1840	Blanchard, Henry.	Neponset.	
1865	Bliss, Charles.	Springfield.	
1850	Bonney, Franklin.	Hadley.	
1853	Borland, John N.	Boston.	
1827	†Boutelle, Thomas R.	Fitchburg.	1860
1835	Bowditch, Henry I.	Boston.	
1863	Bowles, Stephen Wallace.	Boston.	
1828	†Boyden, Wyatt C.	Beverly.	1857
1839	†Boylston, Ward N.	Princeton.	1849
1852	Bradford, David.	Montague.	
1866	Braman, Charles B.	Brighton.	
1839	Braman, Isaac G.	Brighton.	
1861	Bradt, James G.	Lowell.	

Admitted.	Name.	Residence.	Retired.
1866	Breck, Theodore F.....	Springfield	
1854	Breck, William G.....	Springfield	
1860	Breed, B. B.....	Lynn	
1866	Brewster, James Bartlett..	Plymouth	
1825	†Brewster, John M.....	Pittsfield.....	1853
1858	Brewster, John M., Jr....	Palmer Depot.....	
1852	Brewster, Oliver E.....	Pittsfield	
1866	Brigham, Franklin W.....	Shrewsbury.....	
1852	Bronson, John R.....	East Attleboro'	
1836	†Brown, Artemas Z.....	Cambridgeport	1853
1844	Brown, Buckminster.....	Boston	
1864	Brown, Francis F.....	Reading	
1861	Brown, Francis H.....	Boston	
1863	Brown, Fred. D.....	Webster.....	
1866	Brown, George.....	Barre.....	
1846	Brown, Jonathan.....	Tewksbury.....	
1862	Brown, Wm. Symington..	Stoneham.....	
1839	Browne, Charles H.....	Boston.....	
1866	Browne, Wm. Andrews...	Boston	
1832	†Brown, Sylvanus.....	Lynn	1835
1844	Buckingham, C. E.....	Boston	
1864	Bullard, Alfred R.....	Dedham.....	
1865	Bundy, Frank E.....	Boston	
1846	Burdett, George W.....	Clinton	
1854	Burgess, E. P.....	Dedham.....	
1859	Burleigh, W. H.....	Lawrence.....	
1830	Burnap, Sewall G.....	Holliston.....	
1866	Burnham, Chas. Abraham.	Boston	
1863	Burnham, Walter.....	Lowell.....	
1856	†Bushnell, William.....	Boston	1865
1860	Buttrick, J. F.....	Block Island, R. I..	
1843	Cabot, Samuel, jun.....	Boston.....	
1848	Cady, Franklin A.....	Pittsfield	
1862	Calkins, Marshall.	Springfield.....	
1858	Campbell, Benj. F.....	East Boston.....	
1865	Campbell, W. H.....	Roxbury	
1862	Carney, Sydney H.....	Boston.....	
1848	†Carpenter, Benoni.....	Pawtucket.....	1864
1822	Carpenter, Elijah W.....	New York.....	
1863	Carpenter, Marcus S.....	Norton	
1832	†Carpenter, Nelson.....	Warren	1860
1845	†Carpenter, Seba A.....	N. Attleborough....	1852
1858	Chace, John B.....	Taunton.....	
1845	*Chadbourne, Thomas*.....	Concord, N. H.....	
1852	Chamberlain, Cyrus N....	Lawrence.....	
1812	†Champion, Reuben.....	West Springfield...	1853
1814	†Channing, Walter.....	Harrison Square....	1854
1836	†Chapin, Alonzo.....	Winchester.....	1866
1863	Chapin, Henry C.....	Lincoln	
1860	Chapin, Horace.....	Somerville.....	
1846	Chapman, Thomas L.....	Longmeadow.....	
1846	Chase, Hiram L.....	Cambridge	
1856	Chase, Ira E.....	Haverhill	
1858	Chase, Preston M.....	Danvers.....	
1836	*Cheeseman, John*.....	New York.....	

Admitted.	Name.	Residence.	Retired.
1858	Cheever, David W.	Boston	
1830	*Chervin, Nicholas*	Paris, France	
1811	Childs, Henry H.	Pittsfield	
1853	Choate, David	Salem	
1826	Choate, George	Salem	
1850	Choate, George C. S.	Taunton	
1817	†Clark, Atherton	East Hampton	1850
1835	Clark, Henry G.	Boston	
1855	Clark, Henry	Worcester	
1836	Clark, Luther	Boston	
1833	Clark, Sir James	London	
1847	Clarke, Edward H.	Boston	
1851	Clarke, Rowse R.	Whittonsville	
1865	Cleaveland, Daniel A.	West Tisbury	
1846	Cleveland, Charles D.	Boston	
1843	Clough, John	Woburn	
1840	†Clough, Willard, jun.	Pittsfield	1854
1865	Cobb, John E.	Taunton	
1850	Codman, Benjamin S.	Boston	
1843	Codman, Willard W.	Boston	
1858	Coggswell, George B.	North Easton	
1832	Cogswell, George	Bradford	
1846	Cogswell, William	Georgetown	
1835	Coit, Daniel T.	Boston	
1866	Coleman, Wm. Francis	Boston	
1847	Collamore, Francis	No. Pembroke	
1855	Collins, T Clarkson	Great Barrington	
1854	Colony, George D	Fitchburg	
1846	Comstock, W. W.	Middleborough	
1865	Cool, Daniel M.	Conneaut, O.	
1854	Coolidge, Algernon	Boston	
1856	Coolidge, James	Athol Depot	
1837	Cotting, Benjamin E.	Roxbury	
1831	Cox, Benjamin, jun.	Salem	
1862	Corey, Charles G.	Royalston	
1865	Cornish, Aaron	New Bedford	
1852	***Copland, James***	London	
1857	**Cowdray, Arthur Harris**	Stoneham	
1856	**Cowles, H.**	Saxonville	
1839	**Crane, Phineas M.**	East Boston	
1866	**Creaghe, John O'Duyer**	Boston	
1859	**Crehore, C. F.**	Boston	
1864	*Crosby, Dixi*	Hanover, N. H.	
1848	*Crosby, Josiah*	Manchester, N. H.	
1850	Cross, Enoch	Newburyport	
1856	Crowell, John, jun.	Haverhill	
1840	Cummings, J. A.	Boston	
1832	†Cunningham, E. L.	Boston	1846
1843	Currier, William J.	Lexington	
1861	Curtis, Hall	Boston	
1849	**Cushing, Benjamin**	Dorchester	
1862	**Cushing, Jos. Whitney**	Boston	
1866	**Cushing, Stephen**	Boston	
1856	**Cutter, Ephraim**	Woburn	
1839	†**Cutler, William W.**	Reading	1849

Admitted.	Name.	Residence.	Retired.
1840	Dale, William J.....	Andover.....	
1865	Dalton, George Osgood...	Woburn.....	
1862	Damon, Howard Franklin.	Boston.....	
1866	Damon, Orison B.....	Illinois.....	
1850	Dana, David.	Lawrence.....	
1836	†Dana, Francis	Boston.....	1854
1866	Daniels, A. H.....	Amherst.....	
1845	Davidson, Herman E.....	Gloucestcr.....	
1842	†Davis, Amasa	Palmer.....	
1864	Davis, Orvis O.....	No. Andover.....	
1862	Dean, Eben. A.....	Montague	1844
1813	†Dean, Oliver.....	Framingham.....	
1844	Dean, James B.....	North Easton.....	
1860	Dean, John.....	Boston.....	
1852	Deane, A. C.....	Greenfield	
1866	Deane, A. Sumner.....	Fall River.....	1861
1839	†Dearborn, Abraham D....	Cliftondale.....	
1832	*De Ferman, M*.....	Paris.....	
1836	*Delafield, Edward*.....	New York.....	
1866	Delano, Barna Ladd.....	Boston.....	
1863	Denny, James Henry.....	Somerville.....	
1846	Denison, George W.....	Chicopee	1865
1834	†Denniston, Edward E....	Northampton.....	
1844	Derby, George.....	Boston.....	
1862	Derby, Hasket.....	Boston.....	
1860	De Wolf, Oscar C.....	Northampton	
1841	De Wolf, T. K.....	Chester Centre.....	
1866	De Wolfe, James E.....	Georgetown.....	
1847	Dickerman, Lemuel.....	Foxborough.....	
1846	Dickey, Hanover.	Lowell.....	
1837	Dix, John H.....	Boston.....	
1846	Doane, George W.....	Hyannis.....	
1841	Dodge, Franklin.....	Harwich.....	
1839	Doggett, Perez F.....	Wareham.....	
1864	Dole, John.....	South Reading.....	
1861	Dole, Francis F.....	Methuen.....	
1852	Dorr, James C.....	Medford.....	
1865	Douglass, John A.....	Amesbury.....	
1846	Downes, Nathaniel.....	Hanover.....	
1850	Dow, Darius A.....	Shirley.....	
1860	Dow, John O.....	Harvard.....	
1852	Draper, Abijah W.....	W. Roxbury.....	
1858	Draper, Joseph.....	Worcester.....	
1865	Draper, J. R.....	Dedham.....	
1857	Drew, David F.....	Lynn.....	
1844	Drew, S. Watson.....	Woburn.....	
1865	Driver, Stephen W.....	Cambridge.....	
1811	†Drury, Benjamin.....	Spencer.....	1832
1865	Drowne, H. W.....	Richmond.....	
1862	Drummond, Thos. Menzies	Boston.....	
1836	*Dudley, Benjamin W*.....	Lexington, Ky.....	
1866	Dudley, Henry W.....		
1841	Duncan, Charles M.....	Shelburne.....	
1838	Duncan Samuel	Williamstown.....	
1836	*Dunglison, Robley*.....	Philadelphia.....	
1852	Dunlap, James.....	Northampton	

Admitted.	Name.	Residence.	Retired.
1837	Dupee, Horace	Boston	
1866	Durgin, Samuel Holmes	Boston	
1842	Durkee, Silas	Boston	
1866	Dutton, Samuel Lane	Boston	
1851	Dwelly, Jerome	Fall River	
1862	Dwight, William	Bernardston	
1830	†Dyer, Henry	Boston	1865
1849	Dyer, Jonah Franklin	Gloucester	
1847	Eastham, Charles	Boston	
1851	Eastman, Edmund T.	Boston	
1865	Eaton, William W	South Reading	
1861	Eayres, Chas. G. A	Tyngsborough	
1847	Edwards, Nathaniel B	N. Chelmsford	
1850	Ellis, Calvin	Boston	
1863	Emerson, James	Ashby	
1862	Everett, James B	Falmouth	
1865	Everett, Willard S	Fairmount	
1855	Fabyan, George	Boston	
1866	Fairchild, George E	Worcester	
1835	Farnum, Joseph, jun	Salem	
1848	Faulkner, George	Jamaica Plain	
1837	Fay, Allen C	Milford	
1866	Fay, George W	East Weymouth	
1861	Fearing, Benjamin, jun	Wareham	
1829	†Fearing, Elisha P	Nantucket	1865
1838	†Ferre, Henry	Dalton	
1863	Fenn, Artemas Ira	Boston	
1858	Ferguson, Hugh	South Boston	
1839	Field, Caleb C	Leominster	
1807	†Fifield, Noah	Weymouth Landing	
1858	Fifield, W. C. B	Harrison Square	
1866	Fish, D. B. N	North Amherst	
1862	Fisher, Theodore Willis	South Boston	
1847	†Fiske, Calvin P	Fiskedale	1866
1865	Fiske, Daniel S	East Brookfield	
1852	Fisk, Samuel A	Northampton	
1837	†Fitch, Worham L	Springfield	1864
1861	Fletcher, Samuel W	Pepperell	
1863	Fletcher, Wm. K	Fitchburg	
1829	Flint, John	Boston	
1847	Flint, John Sydenham	Roxbury	
1841	Flint, Kendall	Haverhill	
1856	Fobes, Joseph B	Taunton	
1847	Fogg, David S	Dedham	
1851	Fogg, John S. H	South Boston	
1846	Folts, Daniel V	East Boston	
1839	†Ford, Oliver	Hyannis	1852
1835	Forsyth, James B	Chelsea	
1856	Forsaith, Francis F	Weymouth	
1844	Foster, Fordyce	Cohasset	
1840	Foster, James W	No. Attleborough	
1857	Foster, James M	Wilbraham	
1865	Fox, Lorenzo S	Lowell	
1848	Francis, Tappan E	Brookline	

Admitted.	Name.	Residence.	Retired.
1866	Francis George E.	Worcester.	
1866	Franks, Louis Edward.	Boston.	
1839	French, Nathan.	Malden.	
1860	French, John O.	Hanover.	
1865	Frisbie, Jesse F.	Woburn.	
1864	Frothingham, Geo. E.	North Becket.	
1860	Fuller, H. H.	Charlestown.	
1842	†Fuller, Milton.	Boston.	
1856	Gage, Daniel Parker.	Lowell.	
1851	Gage, Edward.	Woburn.	
1854	Gage, Thomas H.	Worcester.	
1839	Gale, Stephen M.	Newburyport.	
1852	Galloupe, Isaac F.	Lynn.	
1866	Gamwell, Harlow.	Huntington.	
1843	†Gardner, Johnson.	Pawtucket.	
1866	Gardner, Wm. Warren.	Springfield.	
1866	*Garnier, Pierre.*	Paris, France.	
1863	Garceau, Treffle.	Roxbury.	
1858	Garland, G. W.	Lawrence.	
1854	Garland, Joseph.	Gloucester.	
1849	Garratt, Alfred C.	Boston.	
1864	Gavin, Michael F.	Boston.	
1848	Gay, George H.	Boston.	
1836	*Geddings, E.*	Charleston, S. C.	
1854	Gifford, Silas S.	East Stoughton.	
1854	Gilbert, John Henry.	Quincy.	
1840	Gile, Daniel.	Marblehead.	
1865	Gilman, J. S.	Lowell.	
1866	Goddard, J. A.	Huntington.	
1849	†Godding, Alvah.	Winchendon.	1862
1858	Godding, W. W.	Washington, D. C.	
1847	†Gooch, William B.	South Dennis.	
1859	Goodell, John W.	Lynn.	
1847	Goodnough, Levi.	Sudbury.	
1822	†Goodman, Otis.	South Hadley.	1830
1834	Gordon, Charles.	Boston.	
	†Gordon, Timothy.	Plymouth.	1859
1835	Gordon, William A.	New Bedford.	
1832	Gould, Augustus A.	Boston.	
1851	†Gould, Humphrey.	Rowe.	1858
1858	Gould, Joshua B.	Templeton.	
1859	Gould, Joseph F.	South Boston.	
1846	Gould, Samuel H.	Brewster.	
*1832	Graves, John W.	Chelsea.	
1861	Gray, Adoniram J.	Minneapolis, Min.	
1834	Gray, Francis H.	Boston.	
1861	Gray, William.	Tewksbury.	
1858	Green, John.	Boston.	
1827	Green, John O.	Lowell.	
1826	†Green, Joshua.	Groton.	1857
1856	Green, Samuel A.	Boston.	
1854	Greene, F. C.	Easthampton.	
1864	Greene, James Sumner.	Milton.	
1846	Greene, Moses C.	Boston.	
1864	Greene, Nath'l, jun.	Boston.	

Admitted.	Name.	Residence.	Retired.
1841	†Greene, William	North Falmouth	1853
1863	Greene, W. W	Pittsfield	
1849	Greer, Robert	Boston	
1831	†Gregg, Samuel	Boston	1860
1858	Griggs, Thomas T	Grafton	
1820	†Grosvenor, David A	Reading	1853
1840	Grosvenor, D. A., jun	Danvers	
1830	†Grosvenor, John M	Methuen	1856
1864	Grosvenor, John Milton	Woburn	
1840	†Guilford, Jonas	Spencer	1853
1848	Hadduck, Charles	Beverly	
1846	Hagar, Joseph S	East Marshfield	
1846	Hall, Adino B	Boston	
1866	Hall, Marquis	Spencer	
1836	*Hall, William*	Baltimore	
1835	Hamilton, Erastus D	Conway	
1840	Hammond, Josiah S	Plympton	
1863	Hammond, L. H	Oakham	
1864	Hanks, H. T	Royalston	
1846	Harlow, E. A. W	Boston	
1847	Harlow, James F	Boston	
1861	Harlow, John M	Woburn	
1842	Harris, Jonas C	W. Cambridge	
1863	Hart, John	Boston	
1859	Hartley, James W	Fall River	
1832	†Harwood, Daniel	Boston	1862
1861	Hartnett, Maurice K	Boston	
1837	Haskell, Benjamin	Rockport	
1839	Haskell, Joseph	Rochester	
1866	Hastings, Benjamin F	East Abington	
1837	*Hastings, Charles*	Worcester, Eng	
1851	†Hawks, Elihu S	North Adams	1866
1829	†Hayden, John C	Cambridge	1862
1859	Hay, Gustavus	Boston	
1851	*Hayes, Augustus A*	Boston	
1858	Hayward, John McLean	Boston	
1843	Hayward, George	Boston	
1859	Heard, J. Theodore	Boston	
1844	Heard, John	Townsend	
1842	Heaton, George	Boston	
1842	†Hedge, Josiah D	Cambridge	1846
1862	Herrick, G. H. W	Charlestown	
1836	*Hewson, Thomas T*	Philadelphia	
1822	Heywood, Benjamin F	Worcester	
1853	Hildreth, Charles H	Williamsburg	
1858	Hill, Gardner C	Warwick	
1854	Hill, John B	Boston	
1839	Hitchcock, Alfred	Fitchburg	
1853	Hitchcock, Joseph G. S	Foxborough	
1864	Hitchcock, Thomas B	Boston	
1852	Hobbs, Alvah	Boston	
1825	†Hodges, Isaac	North Adams	1846
1853	Hodges, Richard M	Boston	
1854	Hodgdon, Richard L	West Cambridge	
1836	*Hodgkin, Thomas*	London	

Admitted.	Name.	Residence.	Retired.
1854	Hoffendahl, H. L. H.....	Boston.....	
1836	*Holbrook, John E*.....	Charleston, S. C....	
1862	Holbrook, Silas P.....	East Douglass.....	
1854	Holbrook, William.....	Palmer Depot.....	
1855	Holcomb, C. C	Lee.....	
1846	*Holland, Henry*.....	London.....	
1834	†Holman, Eliakim A.....	Harvard.....	1860
1855	Holman, Silas A.....	Taunton.....	
1859	Holmes, A. R.....	New Bedford	
1841	Holmes, Christopher C....	Milton	
1848	Holmes, Howland.....	West Cambridge....	
1858	Holmes, H. M.....	South Adams.....	
1836	Holmes, Oliver W.....	Boston.....	
1846	Holt, Daniel.	Lowell.....	
1850	Homans, Charles D.....	Boston.....	
1820	Homans, John.....	Boston.....	
1862	Homans, John, jun.....	Boston.....	
1865	Homer, John.....	Bucksport, Me.....	
1826	Hooker, Anson.....	East Cambridge....	
1855	Hooker, Anson P.....	East Cambridge....	
1821	†Hooker, George.....	Longmeadow.....	1853
1839	Hooper, Foster.....	Fall River.....	
1859	Hooper, Fred. H.....	New Bedford.....	
1836	Hooper, Robert W.....	Boston.....	
1866	Hope, George Henry.....	Seaforth, Eng.....	
1840	†Hopkins, Lewis S.....	Northampton.....	1842
1860	Hoskins, T, H.....	Boston.....	
1856	Hosmer, Alfred.....	Watertown.....	
1852	†Hovey, Daniel.....	Greenfield.....	1856
1843	Howard, Frederick.....	Randolph.....	
1849	Howard, Levi.....	Chelmsford	
1851	Howarth, James.....	Andover.....	
1823	†Howe, Appleton.....	South Weymouth..	1859
1848	Howe, Charles.....	Taunton	
1840	Howe, Estes.....	Cambridge	
1854	Howe, Francis A.....	Newburyport.....	
1857	Howe, George M.....	Framingham.....	
1832	†Howe, Samuel G.....	Boston.....	1850
1866	Howe, Woodbridge R.....		
1854	Hoyt, Ahira B.....	Gloucester.....	
1848	Hoyt, Enos.....	Framingham.....	
1844	Hubbard, Benjamin.....	Plymouth.....	
1865	Hubbard, Charles T.....	Taunton.....	
1837	Hubbard, George.....	Boston.....	
1861	Hubbard, Henry B.....	Taunton.....	
1860	Hubon Peter E.....	Worcester	
1848	Huckins, David T.....	Watertown	
1854	Hulbert, Chauncy M.....	South Dennis	
1866	Hull, William Henry.....	Essex.	
1830	†Hunt, Ebenezer	Danvers Port.....	1860
1848	Hunt, Otis E.....	Waltham	
1859	Hurd, Samuel H.....	Charlestown	
1856	Hurd, Yorick G.....	Amesbury.....	
1863	Hurley, John F.....	Boston.....	
1866	Huse, Ralph C., jun.....	Georgetown.....	
1864	Hutchins, Isaiah	West Acton.....	

Admitted.	Name.	Residence.	Retired.
1858	Hutchins, John W.	So. Framingham.	
1856	Hyde, George S.	Boston.	
1840	Hyndman, James.	Boston.	
1865	Inches, Charles Edward.	Boston.	
1836	Inches, Herman B.	Boston.	
1863	Ingalls, Paschal P.	South Boston.	
1866	Ingalls, Richard Maybery.	South Boston.	
1836	Ingalls, William.	Boston.	
1863	Ireland, Edward Dillon.	Lowell.	
1843	Jackson, Alexander.	Plymouth.	
1833	Jackson, Charles T.	Boston.	
1802	Jackson, James.	Boston.	
1832	Jackson, J. B. S.	Boston.	
1836	*Jackson, Samuel.*	Philadelphia.	
1812	†James, Benjamin.	Weston.	1844
1863	Jameson, Robert Edwin.	Woburn.	
1833	Jarvis, Edward.	Dorchester.	
1854	Jarvis, John F.	Boston.	
1858	Jeffries, B. J.	Boston.	
1826	Jeffries, John.	Boston.	
1854	Jenks, Thos. L.	Boston.	
1849	Jennings, John Henry.	New Bedford.	
1856	Jewett, Charles C.	Holliston.	
1850	Jewett, Frederic A.	Shrewsbury.	
1848	Jewett, George.	Fitchburg.	
1849	Jewett, Henry A.	Northborough.	
1839	Jewett, Jeremiah P.	Lowell.	
1866	Johnson, Amos H.		
1866	Johnson, E. M.	Williamsburg.	
1840	Johnson, Henry F.	Southborough.	
1865	Johnson, Geo. Whitefield.	Southborough.	
1818	†Johnson, Jonathan G.	Newburyport.	1861
1866	Johnson, Joseph Taber.	Washington, D. C.	
1840	Johnson, Joshua J.	Northborough.	
1845	Johnson, Othello O.	Framingham.	
1866	Johnson, Otis H.	Haverhill.	
1817	†Johnson, Samuel.	Salem.	
1849	Johnson, William O.	Boston.	
1856	Jones, D. Wayland.	Medfield.	
1865	Jones, George Howard.	Boston.	
1846	Jones, George S.	Boston.	
1849	Jones, Henry N.	Kingston.	
1843	Jones, Joseph S.	Boston.	
1862	Jones, Maurice E.	Chelsea.	
1835	†Jones, Nathan.	Wenham.	1857
1859	Jordan, Charles.	South Reading.	
1830	Keep, Nathan C.	Boston.	
1846	Kelley, Elbridge G.	Newburyport.	
1863	Kemble, Arthur.	Salem.	
1861	Kemp, Alba Enoch.	North Prescott.	
1800	Kidder, Moses W.	Lowell.	
1838	Kimball, Gilman.	Lowell.	
1846	Kimball, Walter H.	Andover.	

Admitted.	Name.	Residence.	Retired.
1848	King, George	Franklin	
1842	King, John B	Nantucket	
1838	†Kinniston, Timothy	Haverhill	1857
1845	Kittredge, Floyer G.	South Danvers	
1861	Kittredge, F. R. C.	Waltham	
1830	†Kittredge, Ingalls	Beverly	1858
1834	†Kittredge, Theodore	Waltham	1862
1845	Kneeland, Samuel	Boston	
1862	Knight, Nathaniel J.	East Somerville	
1851	Knowlton, Charles L.	Ashfield	
1816	†Lamb, Dan	Charlton	1820
1847	Lamb, William Dan	Lawrence	
1848	Lambert, Alfred	Springfield	
1856	Lamson, John A.	Boston	
1837	†Lamson, Josiah	Essex	1852
1865	Langmaid, Samuel W.	Boston	
1865	Lawton, T. C	Hinsdale	
1851	Lawrence, George C.	Adams	
1856	Leach, William	Holmes's Hole	
1839	Learned, E. T.	Fall River	
1865	Leavitt, W. W.	West Stockbridge	
1843	†Lee, Henry S.	Boston	1864
1844	Leland, Francis	Milford	
1851	†Leland, Phinehas W.	Fall River	1861
1819	†Leonard, George	Taunton	1852
1831	Leonard, Jonathan	Sandwich	
1850	Leonard, Marcus B.	East Boston	
1851	Lester, William	South Hadley	
1861	Lewis, F. B. A.	Watertown, N. Y.	
1827	†Lewis, Winslow	Boston	1860
1865	Lincoln, David F.	Boston	
1855	Lincoln, Francis M.	Boston	
1859	Lincoln, Geo. Cooke	Natick	
1864	Lincoln, W. H.	Hubbardston	
1859	Livermore, Abel C.	Stow	
1862	Livingston, Alfred	Lowell	
1866	Logan, Samuel Moore	East Boston	
1864	Lombard, Jos. Stickney	Boston	
1824	†Longley, Rufus	Haverhill	1852
1862	Lord, Friend Drake	Sterling	
1864	Loring, Edw. Greeley, jun.	Baltimore, Md.	
1844	†Loring, George B.	Salem	1854
1840	Lothrop, John L	Provincetown	
1833	*Louis, P. Ch. A.*	Paris	
1856	Lovejoy, Oliver S.	Haverhill	
1839	Lovell, Ephraim	West Boylston	
1866	Lucas, H. S.	Chester	
1836	*Luxemburgh, Henry*	New Orleans	
1846	Lyman, George H.	Boston	
1855	Lynde, James P.	Athol	
1858	Lyons, Charles F.	Waverly, N. Y.	
1863	Mack, David, jun.	Belmont	
1840	Mack, William	Salem	
1863	MacGregor, Murdoch	Boston	

Admitted.	Name.	Residence.	Retired.
1824	†Mackie, Andrew	New Bedford	1866
1850	Mackie, John H	New Bedford	
1864	Mackie, Wm. Basilio	Boston	
1840	Mann, Benjamin	Roxbury	
1843	Mann, Cyrus S.	Newton Corner	
1852	Mann, Jonathan	South Boston	
1862	Manley, Edwin	North Easton	
1854	Manning, Joseph	Rockport	
1841	Mansfield, Joseph D.	South Reading	
1839	Marsh, Austin	Carlisle	
1858	Marsh, Lebbeus Eaton	Wales	
1831	†Marshall, Jonas A.	Fitchburg	1864
1825	†Marshall, Silas	Templeton	1832
1840	Marston, Ephraim	Fitchburg	
1862	Martin, Alex. D. W.	Boston	
1846	Martin, Henry Austin	Roxbury	
1838	†Martin, Henry J.	Boston	1856
1852	Martin, Oramel	Worcester	
1863	Martin, Saxton P.	New Braintree	
1844	Mason, Augustus	Brighton	
1855	Mason, William	Charlestown	
1850	Matthes, Gustavus F.	New Bedford	
1848	Mattson, Morris	New York	
1834	*Maunoir, J. P.*	Geneva, Switz.	
1849	*Mauran, Joseph*	Providence	
1849	Maynard, John P.	Dedham	
1865	McDonald, A. E.	Boston	
1865	McDonald, James	Boston	
1865	McDonald, Wm. Lewis	Boston	
1864	McDougall, Samuel J.	Boston	
1864	McLaughlin, Jas. Augustin	Boston	
1855	McLean, A. S.	Springfield	
1864	McSheehy, John J.	Boston	
1860	Mead, M. S.	Northfield	
1863	Merriam, Jos. Waite	Boston	
1831	Metcalf, John G.	Mendon	
1842	Mifflin, Charles	Boston	
1854	Mighill, Stephen	Boston	
1846	Mignault, Pierre B.	Worcester	
1851	Miller, Alfred	Fitchburg	
1838	Miller, Erasmus D.	Dorchester	
1851	Miller, J. Leland	Pittsfield	
1848	*Miller, Lewis L.*	Providence, R. I.	
1845	Millett, Asa	Bridgewater	
1860	Mills, C. D	Pittsfield	
1856	Miner, David W.	Ware	
1845	Minot, Francis	Boston	
1862	Mitchell, H. Hedge	E. Bridgewater	
1844	†Mitchell, Jacob	Chelsea	1865
1861	Moffatt, Geo. T.	Boston	
1864	Montville, Alfred	Hatfield	
1848	†Moore, Edward B.	Boston	1862
1851	Moore, Ira L.	Boston	
1861	Moore, Jas M.	South Groton	
1842	Morland, William W.	Boston	
1830	Morrill, Samuel	Boston	

Admitted.	Name.	Residence.	Retired.
1854	Morris, W. B.....	Charlestown.....	
1843	Morse, Horatio G.....	Roxbury.....	
1854	Morse, J. R.....	North Cambridge...	
1846	Morse, Luther B.....	Watertown.....	
1853	Morton, Lloyd.....	Pawtucket.....	
1828	†Mulliken, Isaac W.....	Stow.....	1834
1860	Munsell, G N	Harwich Centre....	
1834	Munroe, A. Le Baron.....	Medway.....	
1863	Munn, Curtis Emerson....	Westfield.....	
1859	Murphy, Joseph.....	Taunton.....	
1856	Neilson, William.....	Manchester.....	
1862	Nelson, Abiel W.....	Mystic, Ct.....	
1865	Nelson, Daniel Thurber...	Chicago, Ill.....	
1830	*Nelson, J.*.....	Montreal.....	
1813	†Newell, Jonathan.....	Harvard.....	1846
1845	Newell, Robert W.....	Boston.....	
1838	Newhall, Asa T.....	Lynn.....	
1854	Newhall, Edward.....	Lynn.....	
1860	Nichols, Geo. H.....	Boston.....	
1865	Nichols, Geo. Merrick....	Boston.....	
1859	Nichols, John T. G.....	Cambridge.....	
1841	†Nichols, Joseph D.....	Palmer.....	1862
1820	†Nichols, Paul L.....	Kingston.....	1857
1848	Nichols, Thomas G.....	Freetown.....	
1847	Nihill, John L.....	South Boston.....	
1865	Norris, Albert L.....	Boston.....	
1832	Noyes, Josiah.....	Needham.....	
1842	Nye, James M.....	Lynn.....	
1861	O'Connell, Patrick A.....	Boston.....	
1866	Ogden, Wm. Martyn.....	Boston.....	
1843	Oliver, Fitch Edward.....	Boston.....	
1855	Oliver, Henry Kemble....	Boston.....	
1837	†Orcutt, Harvey.....	Westhampton.....	1866
1858	Orcutt, Almon M.....	Hardwick.....	
1862	Ordway, John P.....	Boston.....	
1841	Orr, Samuel A.....	East Bridgewater...	
1833	Osborn, George.....	Danvers.....	
1836	*Osgood, Daniel*.....	Havana, Cuba.....	
1852	Osgood, John W.....	Saxonville.....	
1830	Osgood, Joseph.....	Danvers.....	
1842	Osgood, J. W. D.....	Greenfield.	
1856	Osgood, William.....	Boston.....	
1855	Otis, G. A.....	Springfield.....	
1826	†Otis, George W.....	Chelsea.....	1860
1862	Owen, Varillus Linus.....	Springfield.....	
1865	Paddock, F. K.....	Pittsfield.....	
1855	Page, Calvin G.....	Boston.....	
1865	Page, John T.....	Winchendon.....	
1854	Page, William H.....	Boston.....	
1864	Paige, Nomus.....	Taunton.....	
1854	†Paine, Isaac.....	Marshfield.....	1860
1840	Paine, Stephen A.....	Provincetown.....	
1845	Palmer, Edward D. G.....	Boston.....	

Admitted.	Name.	Residence.	Retired.
1832	**Palmer, Ezra**	Boston	
1829	†**Palmer, Joseph**	Boston	1863
1864	**Palmer, John K**	Cambridgeport	
1847	**Parcher, Sewell F**	East Boston	
1837	†**Parker, Daniel**	Billerica	1846
1839	**Parker, David**	Gardner	
1840	**Parker, David M**	Boston	
1864	Parker, Edgar	Saxonville	
1838	Parker, Hiram	Lowell	
1841	Parker, James O	Shirley	
1847	Parker, Moses	Melrose	
1861	*Parker, Peter*	Washington, D. C.	
1866	Parker, W. M	Milford	
1848	Parks, Luther	Boston	
1863	Parks, W. H	Great Barrington	
1865	Parsons, John E	Charlestown	
1837	*Parsons, Usher*	Providence, R. I.	
1856	Patridge, Louis E	Natick	
1860	Pattee, Asa F	West Amesbury	
1852	**Pattee, William S**	Quincy	
1850	**Patch, Franklin F**	Boston	
1837	Peck, William D	Sterling	
1863	Peirce, Arthur G	Hinsdale	
1844	Peirson, Edward B	Salem	
1854	Perkins, Edward A	Boston	
1851	**Perkins, George A**	Salem	
1830	PERKINS, HENRY C	Newburyport	
1839	†Perkins, John	Middleborough	1854
1863	Perkins, George Thos	Newton Lower Falls	
1832	†Perley, Daniel	Lynn	1864
1866	Perry, C. H	Webster	
1851	Perry, Ira	West Medway	
1823	†Perry, Nathan	Cambridgeport	1830
1835	Perry, William F	Mansfield	
1860	Person, John W	Lowell	
1818	†Phelps, Abner	Boston	1847
1844	Phelps, Charles A	Boston	
1837	†Phelps, Eben S	Middleton	1852
1841	Phelps, Thaddeus	N. Attleborough	
1837	†Phillips, Henry P	North Adams	1852
1841	Phinney, Erastus O	Melrose	
1845	†Pickett, Noble B	Great Barrington	1862
1836	*Picton, J. M. W*	New Orleans	
1865	Pierce, Charles L	Ashburnham	
1839	†Pierce, Delano	Grafton	1847
1850	Pierce, George W	Leominster	
1840	Pierce, John	Edgartown	
1822	†Pierce, Nathaniel	Ashburnham	1839
1866	Pillsbury, Edward Liston	Fitchburg	
1839	Pillsbury, Harlin	Lowell	
1859	Pillsbury, Harlin H	Medford	
1861	Pillsbury, John M	Lawrence	
1850	Pineo, Peter	Hyannis	
1863	Pinkham, Geo. Edwin	Lowell	
1848	†Plimpton, Daniel B	North Oxford	1857
1865	Plunkett, F. C	Lowell	

Admitted.	Name.	Residence.	Retired.
1861	Plympton, Ashael A.....	Shirley.....	
1837	†Poole, Alexander.....	Chelsea.....	1865
1866	Porter, Albert Augustin...	Wrentham.....	
1865	Porter, Charles Burnam...	Boston.....	
1834	Porter, Joshua.....	North Brookfield...	
1858	Porter, Royal N.....	Deerfield	
1865	Powers, Geo. Herman.....	Boston.....	
1861	Pratt, Henry.....	Lanesborough.....	
1839	Pratt, Jefferson.....	Hopkinton.....	
1858	Prentiss, H. Conant.....	Worcester.....	
1865	Presbury, Silas D.....	Taunton.....	
1866	Priest, George A.....	Manchester	
1861	Prince, J. P.....	Lynn.....	
1841	Prince, William H.....	Northampton.....	
1859	Proctor, William B.....	New Sharon, Me....	
1860	Provan, Robert.....	South Boston.....	
1851	Puffer Chenery.....	Shelburne Falls	
1830	Putnam, Charles G.....	Boston.....	
1863	Quimby, Elisha Hervey...	Salem.....	
1853	Randall, George H.....	N. Rehoboth.....	
1832	†Randall, Menzies R.....	Rehoboth.....	1854
1857	Ranney, Mark.....	Mt. Pleasant, Iowa.	
1863	Ransom, N. M.....	Chatham, N. Y.....	
1843	Read, William.....	Boston	
1852	Renton, George.....	Boston.....	
1849	Renton, John.....	Auburndale.....	
1823	Reynolds, Edward.....	Boston.....	
1853	Reynolds, John P.....	Boston.....	
1863	Reynolds, Joseph Brown..	Concord.....	
1865	Rice, A. B.....	Hatfield.....	
1866	Rice, A. R	Springfield.....	
1866	Rice, Charles H.....	Fitchburg.....	
1853	Rice, David.....	Leverett.....	
1864	Rice, Frank H.....	Worcester.....	
1855	Rice, J. Marcus.....	Worcester.....	
1855	Richards, James F.....	Campello	
1839	Richardson, Aaron P.....	Boston.....	
1845	Richardson, Eben C.....	Ware.....	
1855	Richardson, Horace.....	Boston.....	
1856	Richardson, John H.....	Medfield.....	
1839	†Richardson, Samuel.....	Watertown	1862
1840	Rising, Henry H	Westborough.....	
1836	†Robbins, James W.....	Uxbridge.....	1866
1863	Roberts, Michael.....	Lawrence.....	
1858	Robinson, Albert B.....	Roxbury	
1838	Robinson, Erastus.....	Northbridge.....	
1859	Robinson, J. Henry	Southborough.....	
1859	Robinson, John L.....	Wenham	
1862	Robinson, Thad. Pulaski..	Newton Corner.....	
1858	Rockwood, Henry.	Westford.....	
1866	Rockwell, Joseph W.....	Southwick.....	
1861	*Roeser, Bernhard.*	Athens, Greece.....	
1855	Rogers, Seth....	Pomfret, Ct.....	
1852	Rolfe, Enoch C....	Boston.....	

Admitted.	Name.	Residence.	Retired.
1864	Rood, James T.	Brookfield	
1834	Root, Martin	Byfield	
1865	†Ropes, Francis C.	Boston	1862
1862	Roy, Joseph	Boston	
1858	Ruppaner, Antoine	New York	
1825	†Russell, George	Boston	1856
1844	†Russell, Henry	New Bedford	1848
1862	Russell, Henry	New Bedford	
1854	Russell, Ira	Natick	
1844	Russell, Le Baron	Boston	
1837	Sabin, Henry L.	Williamstown	
1837	†Sabin, Mellen	Lenox	1849
1837	Salisbury, Stephen, jun.	Brookline	
1836	Salter, Richard H.	Boston	
1843	Sampson, Ira	Taunton	
1858	Sargent, George W.	Lawrence	
1850	Sargent, Howard	Boston	
1840	Sargent, Joseph	Worcester	
1851	†Sargent, Seneca	Lawrence	1863
1858	Saville, Henry M.	Boston	
1850	Savory, Charles A.	Lowell	
1866	Sawin, William W.	Chicopee Falls	
1865	Sawyer, Benjamin A.	Haverhill	
1866	Sawyer, Edward	Bridgewater	
1859	Sawyer, Edward J.	Gardner	
1856	Sawyer, Frederick A.	Wareham	
1854	Sawyer, Jeremiah H.	Newburyport	
1860	Sawyer, John W.	Madison, Wis.	
1842	Scammell, Lucius L.	Hopkinton	
1839	Scribner, Isaac W.	Lowell	
1833	Seabury, Benjamin F.	Orleans	
1854	Seaverns, Joel	Jamaica Plain	
1861	Seyffarth, Edmund	Lawrence	
1853	Seymour, L. D	Greenfield	
1852	Sharp, J. Caldwell	Boston	
1836	Shattuck, George C.	Boston	
1863	Shattuck, George Francis	Pepperell	
1863	Shattuck, Jon. Chamberlin	Pepperell	
1852	Shaw, Benjamin S	Boston	
1860	Shaw, Henry Lyman	Boston	
1827	†Shaw, Samuel	Plainfield	1852
1849	Shaw, Samuel	Wareham	
1861	Shipley, George T.	Boston	
1860	Sheldon, L. R.	Boston	
1846	Shove, George	Yarmouth Port	
1852	Shurtleff, Augustine	Brookline	
1834	Shurtleff, Nathaniel B.	Boston	
1857	Sinclair, Alexander D.	Boston	
1864	Sinclair, David F.		
1836	*Simons, Benjamin B.*	Charleston, S. C.	
1864	Simmons, Marshall E.	Chatham	
1839	†Skilton, Benjamin	Lowell	1843
1863	Skinner, Edward M.	Boston	
1864	Skinner, John	Boston	
1848	Slade, Daniel D.	Boston	

Admitted.	Name.	Residence.	Retired.
1854	Smith, Abner M.	Pittsfield.	
1842	†Smith, Alvan.	Monson.	1854
1840	†Smith, Alvah C.	Hamilton.	1844
1856	Smith, Andrew M.	Williamstown.	
1854	Smith, D. P.	Springfield	
1824	†Smith, Jerome V. C.	Boston	1862
1841	†Smith, John.	Wales.	1846
1853	Smith, John M.	Barnstable.	
1836	*Smith, Nathan R.*	Baltimore.	
1865	Smith, Norman.	Groton.	
1854	Smith, William G.	Cabotville.	
1859	Smythe, James.	Boston.	
1846	Snow, George W.	Newburyport.	
1863	Snow, Jesse W.	Danvers.	
1856	Soule, H. S.	Winthrop.	
1850	Southwick, M. D.	Millville.	
1843	Sparhawk, Thomas.	Amesbury.	
1848	Sparrow, William E.	Mattapoisett.	
1851	Spare, John.	New Bedford	
1866	Spaulding, Ebenezer F.	Georgetown.	
1846	Spaulding, Joel.	Lowell.	
1849	Spaulding, Leonard.	Millbury	
1844	Spaulding, Miles.	Groton.	
1825	†Spaulding, Stephen H.	Reading.	1853
1817	†Spofford, Jeremiah.	Groveland.	1847
1863	Spofford, Morris.	Groveland.	
1820	†Spofford, Richard S.	Newburyport	1857
1824	Spooner, John P.	Milton	
1864	Sprague, F. P.	Boston.	
1853	Sprague, Seth L.	Boston.	
1858	Spring, C. H.	Boston.	
1865	Sproat, H. H.	East Newton.	
1840	†Stacey, Philemon.	Hatfield.	1849
1846	Stacy, Horace.	Boston.	
1836	*Stanley, James.*	London	
1836	†Stearns, George.	Groton.	1862
1852	†Stearns, Samuel.	Greenfield	1838
1860	Stearns, John.	Boston.	
1855	Stedman, Charles E.	Dorchester.	
1864	Stedman, Joseph.	Jamaica Plain.	
1836	Stetson, James A.	Quincy.	
1853	Stetson, John.	West Harwich.	
1845	Stevens, Calvin.	Boston.	
1859	Stevens, Francis J.	Haverhill.	
1837	Stevens, John A.	Boston.	
1851	Stevens, N. C.	West Newton.	
1832	Stevens, William F.	Stoneham.	
1835	Stephenson, Ezra.	Hingham.	
1866	Stickney, A. L.	Sutton	
1852	Stickney, Charles D.	New Bedford.	
1864	Stickney, Horatio G.	Springfield.	
1854	Stickney, James M.	Pepperell.	
1847	Stickney, P. L. B.	Chicopee	
1818	†Stimson, Jeremy.	Dedham.	1857
1827	Stone, Ebenezer.	Walpole.	
1840	Stone, H. Osgood.	Salem.	

Admitted.	Name.	Residence.	Retired.
1831	†Stone, Jeremiah	Provincetown	1859
1854	Stone, Lincoln R.	Newton Corner	
1861	Stone, Silas E.	Walpole	
1862	Stone, Thomas N.	Wellfleet	
1829	Storer, D. Humphreys	Boston	
1853	Storer, Horatio R.	Boston	
1852	Stratton, Elijah	Northfield	
1862	Street, Charles Carroll	Boston	
1847	Streeter, Joseph H.	Roxbury	
1866	Sturgess, Fred. Newton	Kempt, N. S.	
1851	Sullivan, John L.	Malden	
1865	Swan, Charles W.	Boston	
1857	Swasey, C. L.	New Bedford	
1863	Swasey, Oscar F.	Beverly	
1846	Sweat, William W.	Mattapoisett	
1854	†Swift, Alfred	South Dennis	1858
1854	Talbot, Israel T.	Boston	
1854	Tanner, Nelson B.	Abington	
1863	Tanner, Nelson B., jun.	North Abington	
1866	Tarbell, George Grosvenor.	Lincoln	
1851	Taylor, Ashmun C.	Shelburne Falls	
1843	Taylor, Israel H.	Amherst	
1849	Taylor, John B.	East Cambridge	
1858	Temple, Cyrus	Heath	
1857	Temple, Theron	No. Amherst	
1852	Thaxter, Duncan McB.	South Boston	
1845	Thayer, David	Boston	
1830	Thomas, Alexander	Dorchester	
1833	Thomas, Francis	Scituate Harbor	
1857	Thompson, Austin W.	Northampton	
1840	†Thompson, Daniel	Northampton	1861
1861	Thompson, George F.	Belchertown	
1839	Thompson, John L. S.	Lancaster	
1845	Thomson, George N.	Boston	
1858	Thorndike, William	Beverly	
1849	Thorndike, William H.	East Boston	
1857	Tinker, Martin A.	Schenectady, N. Y.	
1842	Tirrell, N. Quincy	East Weymouth	
1847	Tobie, Ira W.	Boston	
1837	Toothaker, Samuel A.	Wilmington	
1830	†Torrey, Augustus	Beverly	1866
1862	Tourtelot, Aug. Valentine.	Boston	
1862	Tower, Chas. C.	So. Weymouth	
1840	Tower, George	Boston	
1859	Towle, Samuel K.	Haverhill	
1849	Townsend, George J.	Natick	
1820	Townsend, Solomon D.	Boston	
1844	Townsend, William E.	Boston	
1857	Tracy, Stephen	Andover	
1864	Treadwell, Josh. Bracket.	Boston	
1863	Tripp, B. H.	Rutland	
1851	Trow, Josiah	Buckland	
1855	Trow, Nathaniel G.	Sunderland	
1854	Trow, William M.	Haydenville	
1843	Tucker, Elisha G.	Boston	

Admitted.	Name.	Residence.	Retired.
1855	Tucker, Geo. G.....	Westfield.....	
1838	†Tucker, Joshua.....	Boston.....	1862
1838	†Tucker, Simeon I.....	Stoughton.....	1863
1865	Turner, O. C.....	Attleborough.....	
1859	Tuttle, Chas. M.....	Littleton, N. H.....	
1859	Tyler, John E.....	Somerville.....	
1855	Tyler, Warren.....	North Brookfield...	
1820	†Tyler, William H.....	North Adams.....	1838
1839	†Ufford, Edward G.....	West Springfield...	1862
1848	Upham, J. Baxter.....	Boston.....	
1861	*Valerj, Gaitano*.....	Rome, Italy.....	
1845	Vaille, Henry R.....	Springfield.....	
1865	Vaughan, Charles E.....	Cambridge.....	
1866	Wadsworth, Oliver F.....	Boston.....	
1846	Wakefield, Horace P	Reading.....	
1856	Wakefield, Jonas F.....	South Malden.....	
1863	Walcott, Henry Peck.....	Cambridge.....	
1854	Waldock, James.....	Roxbury.....	
1855	Walker, Clement A.....	South Boston.....	
1864	Walker, J. Edwin.....	Boston.....	
1858	Walsh, Peter D.....	Boston.....	
1862	Ward, Edwin Fletcher....	East Hampton.....	
1863	Ward, Geo. Whitefield....	Upton.....	
1832	Ward, Henry A.....	Boston.....	
1837	Ware, Charles E.....	Boston.....	
1829	†Ware, Jonathan.....	Milton.....	1860
1854	Warner, Clinton.....	Westminster.....	
1863	Warner, Emerson.....	Worcester.....	
1863	Warren, Dewey Kellogg...	Boston.....	
1832	Warren, Edward.....	Newton L. Falls....	
1846	Warren, George A.....	Hopkinton.....	
1851	Warren, George W.....	West Boylston.....	
1866	Warren, John Collins.....	Boston.....	
1836	Warren, J. Mason.....	Boston.....	
1836	Warren, John W.....	Boston.....	
1820	†Warren, Joseph.....	Middlefield.....	1853
1854	Warren, Joseph H.....	Boston.....	
1861	Warren, Orin.....	West Newbury.....	
1846	Warren, Royal S.....	Waltham.....	
1833	†Warren, Winslow.....	Plymouth.....	1857
1866	Waterman, James H.....	Westfield.....	
1831	Watson, Abraham A.....	Boston.....	
1849	Webber, A. Carter.....	Cambridge.....	
1865	Webber, Samuel G.....	Boston.....	
1865	Webster, Joseph.....	New Bedford.....	
1859	Webster, Joseph R.....	Boston.....	
1837	Weld, C. Minot.....	Jamaica Plain.....	
1843	Weld, Moses W.....	Boston.....	
1846	Wellington, J. Lloyd.....	Swansey.....	
1839	Wellington, W. W.....	Cambridgeport.....	
1839	Wells, David.....	Lowell.....	
1838	West, Benjamin H.....	Boston.....	
1849	West, Joseph O.....	Princeton.....	

Admitted.	Name.	Residence.	Retired.
1843	Weymouth, A. L.	Boston	
1865	Weymouth, Albert B.	Boston	
1837	Wheatland, Henry	Salem	
1863	Wheeler, Charles Aug.	Leominster	
1841	Wheeler, Edward M.	Spencer	
1862	Wheeler, Elbridge G.	N. Becket	
1848	Wheeler, William G.	Chelsea	
1865	Whiston, Edward A.	Deer Island	
1851	Whitcomb, Charles W.	Barre	
1864	White, Charles Henry	Watertown	
1856	White, James C.	Boston	
1854	White, Jonathan A.	Templeton	
1845	White, Robert	Boston	
1833	†Whiting, Augustus	Charlestown	1863
1846	Whitmore, George H.	Lowell	
1852	Whitney, Allston B.	West Newton	
1835	Whitney, Warren J.	Boston	
1856	Whittemore, H. H. F.	Marblehead	
1865	Whittemore, Jacob P.	Haverhill	
1826	†Whittemore, James M.	Brighton	1860
1865	Wigglesworth, Edward	Boston	
1834	†Wight, Danforth P.	Dedham	1863
1865	Wilbur, J. G	Brooklyn, N. Y.	
1845	Wilbur, John R	Chicopee Falls	
1854	Wilcox, Chauncy A.	Uxbridge	
1838	Wilde, James	Duxbury	
1863	Wilder, Burt G	Boston	
1843	Willard, Francis A.	Boston	
1861	Willard, Josiah N.	Boston	
1864	Willard, Robert	Boston	
1864	Williams, Alfred G.	Athol	
1854	Williams, Elisha	Hinsdale Depot	
1849	Williams, Henry W.	Boston	
1849	Williams, Jacob L.	Boston	
1866	Williams, James Long	Boston	
1822	†Williams, Leonard	Chester	1827
1864	Willis, John Warren	Waltham	
1861	Willis, Lemuel Murray	Marblehead	
1864	Wilson, Benjamin F.	New Bedford	
1852	Willson, Milo	Shelburne Falls	
1860	Wilter, John	Brimfield	
1831	Wing, Benjamin F.	Jamaica Plain	
1858	Windship, George B.	Boston	
1863	Winslow, Joseph W.	East Hampton	
1855	Winsor, Frederic	Winchester	
1866	Wood, Albert	Worcester	
1834	†Wood, Alfred	Taunton	1857
1863	Wood, Alexander M.	Boston	
1856	Wood, Franklin A.	Cambridgeport	
1865	Wood, George F.	North Carver	
1839	Wood, Theophilus E.	East Randolph	
1860	*Wood, James R.*	New York	
1855	Woodbury, Elwell	Medford	
1832	Woodward, Ebenezer	Quincy	
1855	Woodward, Rufus	Worcester	
1833	†Worcester, Jonathan F.	Salem	1857

Admitted.	Name.	Residence.	Retired.
1831	Workman, William.....	Worcester.....	
1861	Wright, Eliphalet.....	Lee.....	
1821	†Wright, Lucius.....	Westfield.....	1853
1865	*Wucherer, Otho Edward*...	Bahia, Brazil.....	
1837	Wyman, Jeffries.....	Cambridge.....	
1837	Wyman, Morrill.....	Cambridge.....	
1855	Yale, John.....	Ware.....	
1844	York, Jasper H.....	Dover, N. H.....	
1848	Youngman, David.....	Boston.....	

ERRATA.

In No. V., 1865:

P. 357, line 1, strike out "but."

P. 358, line 20, after the word "also" insert, *their diseases, in the same way made known to us,*

P. 381. The first sentence of the first note should read—

"Il faut toujours en revenir à cette triste vérité que la médecine est la plus noble des professions et le plus triste des métiers."—*Gaz. Med. de Paris*, 1851, tom. v., p. 448."

N. B. The discourse for 1865 was printed from an imperfect copy. See a corrected reprint, after the return of the author, December, 1865.

UNIVERSITY OF MICHIGAN
3 9015 06230 4905